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Reading ability and high school
drop-outs

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READING

ABILITY and

HIGH SCHOOL

DROP-OUTS

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R.C.P.

EAST BRANCH

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READING ABILITY and
HIGH SCHOOL
DROP-OUTS

Chapter
One

THE DROP-OUT
PROBLEM

THE SECONDARY schools of the United States are attracting and holding more and more students. Each decade since 1890 has shown an increase in the percentage of young people of secondary school age enrolled in the high schools of our country. In 1889, 7 per cent of young people of high school age were enrolled; whereas 77 per cent were enrolled in 1950.¹ The increase in the percentage of students who have remained in high school until graduation during this period is even more encouraging. Only 4 per cent of the youth of our country were graduated from high school in 1870, in contrast to 59 per cent in 1950, not quite one hundred years later. As impressive as this growth in the enrollment and holding power of the high school is, however, the 1948-50 United States Office of Education report pointed out that even in 1950 less than 60 per cent of our young people were receiving the benefits of a high school education.²

Although different philosophies exist with regard to leaving school before graduation from high school, both the lay public and the teaching profession are becoming increasingly convinced that all educable youth should receive a secondary school education. The Educational Policies Commission of the National Education Association has given full acceptance to the philosophy that if the

¹U.S. Office of Education, *Biennial Survey of Education in the United States, 1948-50*. Washington, D. C., U.S. Government Printing Office, 1953, p. 15.

²*Ibid.*, p. 24.

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community and nation are to be strengthened to the maximum, all the sons and daughters of all of the people must be appropriately educated by the secondary school.³

Leaders in education have become sufficiently concerned about the losses to the individual and to society brought about through early school leaving to study reasons for school drop-out and to take definite steps designed to reduce it. Among the evidences of this professional concern are the national, state, and local studies which have been carried on since 1930 to determine why our young people are not staying in school until graduation and to recommend changes within the school to improve its holding power.

DROP-OUT STUDIES

The early American Council on Education studies (which included *The Inventory of Youth in Pennsylvania*, prepared by Harlan Updegraph in 1936; the Maryland Study, *Youth Tell Their Story*, summarized by Howard Bell in 1938; and the Report of the New York Regents' Inquiry, *When Youth Leave School*, made by Ruth Eckert and Thomas Marshall in 1938) served as models in many respects for subsequent studies of high school drop-outs. Among the commendable patterns set by these studies were: (1) making contacts with drop-outs to determine their reasons for school leaving through personal interviews instead of through questionnaires, and (2) obtaining evidence of underlying reasons for school leaving rather than the mere listing of on-the-surface reasons.

The study of Louisville, Kentucky, youth conducted by the United States Department of Labor in 1947, and written by Elizabeth Johnson and Caroline Legg in 1948, *Why Young People Leave School*, emphasized, as did the study of *Early School Leavers* made by Harold Dillon in 1949 for the National Child Labor Committee, the ideas that symptomatic attitudes and behavior identify potential drop-outs early in their school experience and that these attitudes and behavior must receive attention early if they are to be changed before the end of the compulsory school

³National Education Association, Educational Policies Commission, *The Purposes of Education in a Democracy*. Washington, D. C., The Association, 1940.

period is reached. Harold Hand's survey of the *Principal Findings of the 1947-48 Holding Power Study of the Illinois Curriculum Program*, written in 1949, also emphasized that better understanding of youth is needed, especially of those youth from lower income families, if they are to be encouraged to raise their socio-economic status through education.

By 1950, state and federal departments of education encouraged the making of local school district studies of drop-outs to supplement statewide and nationwide studies. This change in emphasis was based upon the recognition that, while certain findings seem to be common to all investigations, local situations do vary and it is at the local level that improvement in holding power must take place. Numerous local schools made this type of study. Lee Thurston, Superintendent of Public Instruction in Michigan, well stated the reason for this change in procedure in a bulletin issued in 1952 by the Holding Power Committee of the State of Michigan:

The State Holding Power Committee realized at the outset that the holding power problem was mainly local in its character and solution and therefore that the studies to be effective, must be done in the local schools and communities. The Holding Power Committee's function is to promote leadership, give service, and stimulate study in the local areas.⁴

The New York State Department handbook *Improvement of Holding Power Through a Continuous Study of Youth in School*, also published in 1952, further emphasizes that "each school should know the extent to which it is serving the ends of the heterogeneous mass of youth in the community of school age."⁵ This handbook includes an additional plea for continuity of study of these needs, since change in local and national conditions presents new challenge to the school. *Syracuse Youth Who Did Not Graduate*, a study subsidized by the Board of Education of the city of Syracuse, New York, made in 1950 under the direction of the Research Division headed by Harry P. Smith, illustrates

⁴Holding Power Committee, *Michigan Holding Power Study*. Lansing, Michigan, Department of Public Instruction, 1952, p. 3.

⁵New York State Education Department, *Improvement of Holding Power Through a Continuous Study of Youth in School*. Albany, New York, The University of the State of New York Press, 1952, p. 29.

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the trend toward making local drop-out studies. Another study of local drop-outs is *Now Hear Youth*, a report made in 1953 by Donald Kitch and William McCreary of the California Cooperative Study of School Drop-outs and Graduates, which included twenty-eight study projects involving seventy-three secondary schools.

CHARACTERISTICS AND CAUSES

These and many other studies represent extensive research in attempting to determine who are the boys and girls who are dropping out of school before graduation from high school, what are their characteristics, and why did they leave school before completing their secondary education. Information on the following characteristics of school drop-outs has been obtained in drop-out studies conducted in the past: age; sex; grade reached at time of school leaving; courses taken; intelligence; scholastic grades; achievement test scores; frequency of school transfer; failures; grade retardation; health and physical handicaps; personal appearance; participation in extracurricular activities; leadership; emotional drive; social ideals; adjustment to opposite sex; race; socio-economic class; attitude toward classmates, teachers, and subjects. Information was also obtained about the effect of methods of teaching, general school policies and procedures, size of school, and hidden tuition costs; and about the students' financial needs, occupation of father, size of family, home stability as evidenced by presence of both parents in the home, education of parents, education of siblings, and attitude of parents toward education.

Although there is some local variation among these numerous studies, all researchers agree that the causes of school drop-out are complex. They have found that interrelated factors are associated with school drop-out and that these factors may vary in degree and influence at different times in the life of a particular boy or girl. They have also reported that the greatest percentage of students drop out at or soon after the end of the state compulsory education period. Nationwide, this peak in drop-out occurs in the tenth grade when boys and girls become sixteen years of age.

Other findings are (1) that more boys than girls leave school before graduation, (2) that, while lower intelligence is more characteristic of the drop-outs than of the graduates, most of the drop-outs are educable, (3) that failure in academic subjects is prevalent among drop-outs, and (4) that, while socio-economic status affects the financial need and the attitude of the young person toward education, the failure of the school to provide a curriculum and an emotional environment suited to the tremendous range in interests and abilities of school-age boys and girls is the most important single reason that boys and girls are dropping out of school before graduation from high school. Dillon,⁶ in his study of 1,300 Indiana, Michigan, and Ohio youth, determined that the school was responsible for 69 per cent of the reasons that students left school before completing their secondary education. Smith,⁷ in his study of 383 Syracuse school leavers, found that 62 per cent of the reasons for school leaving were directly attributable to the school. Johnson and Legg⁸ discovered that 67 per cent of the 440 youth whom they studied had left school because they were discontented with some aspect of the school program, and Kitch and McCreary⁹ support these findings in their report that 57 per cent of the reasons that five hundred California youth gave for leaving school were associated with school dissatisfaction.

Among the drop-out potentials which are most frequently mentioned in the studies and which seem to have significance since they tend to assist the identification of underlying reasons for school leaving are the following: dislike for certain subjects, repeated tendency toward failure in formal school experience, lack of satisfactory pupil-teacher relationships, lack of sense of belonging, lack of participation in school activities, and low socio-economic status of parents.

⁶Harold J. Dillon, *Early School Leavers: A Major Educational Problem*. The National Child Labor Committee, Publication No. 401. New York, Moak Printing Company, 1949, p. 24.

⁷Harry P. Smith, *Syracuse Youth Who Did Not Graduate*. Syracuse Board of Education, 1950, p. 28. Mimeographed.

⁸Elizabeth S. Johnson and Caroline E. Legg, *Why Young People Leave School*. United States Department of Labor. Washington, D. C., Government Printing Office, 1949, p. 17.

⁹Donald E. Kitch and William H. McCreary, *Now Hear Youth*, California Cooperative Study of School Drop-outs and Graduates. California State Department of Education Bulletin, Series No. 9. Sacramento, State Department of Education, 1953, p. 33.

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EFFECT OF STUDIES ON SCHOOL PROGRAMS

Much waste motion and discouragement have resulted from the gathering of data which are not put to functional use in improving the school experience of boys and girls. In 1950, the superintendents of school systems in cities of more than 200,000 population realized that much of the effort expended on the obtaining and compiling of reasons for early school leaving would be wasted if the findings from the studies were not incorporated into an improved educational program of meaningful activities. Consequently, they requested that the United States Commissioner of Education arrange a meeting in which the representatives of these schools might study the problems involved in an action program. At the meeting, which was held in Washington in 1950, it was found that many of the schools represented were already experimenting with programs in an effort to test their holding power. The group was stimulated to extend this "action research" and decided to evaluate the progress of holding power programs in their respective school systems and report results at a meeting to be held one year from the time of their first meeting.¹⁰

Several state departments of education, through their curriculum committees, simultaneously stressed the need for action research and encouraged the carrying out of studies to initiate and evaluate programs which might better provide for the needs of boys and girls, but particularly for the needs of those boys and girls who now tend to leave school early.

The programs which were reported back by these superintendents in 1951, together with the reports made by smaller school systems through state department magazines and journal articles, represent an encouraging number of curricular changes which are being tried or which have been found effective in better providing for the interests and aptitudes of all boys and girls and especially for those boys and girls having school drop-out potential. These changes include:

1. Giving in-service training to teachers in child growth and

¹⁰U.S. Office of Education, *Why Do Boys and Girls Drop Out of School and What Can We Do About It*, Report of Representatives of Cities of more than 200,000 Population, Circular No. 269. Washington, D. C., Government Printing Office, 1950.

development and in teaching methods which provide for the needs, interests, and aptitudes of all students.

2. Alerting teachers to drop-out symptoms and the need to give special attention to potential drop-outs of all ages.
3. Introducing differential teaching materials.
4. Increasing guidance personnel.
5. Improving cumulative records and reports to parents.
6. Improving orientation experiences.
7. Making contacts with summer withdrawals.
8. Providing health examinations.
9. Scheduling of longer school periods to enhance the acquaintance between teacher and child.
10. Freeing teachers part of each school day for conference work with students.
11. Organizing smaller classes.
12. Offering instruction in reading.
13. Expanding the testing program.
14. Reducing hidden tuition costs.
15. Placing in part-time work to assist with needed finances.
16. Introducing supervised work experience for credit.
17. Increasing vocational offerings, especially of a short terminal course nature.
18. Adding trade courses.
19. Increasing vocational guidance.
20. Introducing Home and Family Life courses to assist the present adjustment of young people in the family and, in turn, to help them establish homes in which emotionally sound boys and girls may develop.
21. Organizing parent study groups to assist parents in better understanding and guiding their children.
22. Working more closely with parents in effecting adjustments for boys and girls.
23. Changing community attitudes with regard to the worth of education.

RECOGNITION OF THE ROLE OF READING

Among the curricular changes which have been reported by school people who are seek-

ing to provide an educational program which will enable students to meet success and thus encourage them to continue their school experience have been provisions for the development of reading skills on a secondary school level. Superintendents from several of the larger school systems, including those of Detroit, Los Angeles, Milwaukee, Omaha, Philadelphia, Richmond, Rochester, San Francisco, St. Louis, and Syracuse, informally evaluated among holding power efforts during their 1951 conference the reading programs which had been developed in their respective schools.¹¹ Dillon¹² urged the rewriting of texts and other printed instructional material to adapt them to the reading ability of students. The Michigan Holding Power Committee¹³ identified mental ability, scholastic achievement, and *reading level* among the fourteen factors influential in determining whether boys and girls stay in school or drop-out. A Texas study¹⁴ describes the reading ability of high school leavers as at least one year below that of students who graduate. However, factual data related to reading ability as a factor in school drop-out are extremely limited in the literature on holding power. Only four very brief studies of this nature have been located.

The Regents' Report¹⁵ gave these data in table form: The Unit Scale of Attainment in Reading, Division 3, Grades VII and VIII, Form A, and the Unit Scale of Arithmetic, Section 3, Form A, scored in accordance with Grade VIII standards, were passed and failed in the following percentages by 241 ninth grade boys and 272 ninth grade girls who dropped out of school: passing reading and arithmetic—boys 16.6, girls 16.2; passing reading, failing arithmetic—boys 52.7, girls 51.8; failing reading, passing arithmetic—boys 1.7, girls 4.4; failing reading and arithmetic—boys 29.0, girls 27.6. The same tests were passed or failed in the following percentages by 3,349 twelfth grade boys and 3,967

¹¹U.S. Office of Education, *Improving School Holding Power: Some Research Proposals*, Reports of Representative Cities of more than 200,000 Population, Circular No. 291. Washington, D. C., Government Printing Office, 1951, pp. 39-41.

¹²Dillon, *op. cit.*, p. 84.

¹³Holding Power Committee, *op. cit.*, p. 6.

¹⁴Earl Allen and John G. Umstadtd, *The Problem of Drop-outs in the Secondary School*. Texas Study of Secondary Education, Research Study No. 8. Austin, Texas, Department of Education, 1951.

¹⁵Ruth E. Eckert and Thomas O. Marshall, *When Youth Leave School*, Report of the Regents' Inquiry. New York, McGraw-Hill Book Company, 1938, p. 89.

twelfth grade girls who graduated from high school: passing reading and arithmetic—boys 40.1, girls 23.4; passing reading, failing arithmetic—boys 53.0, girls 67.1; failing reading, passing arithmetic—boys 1.5, girls 1.6; failing reading and arithmetic—boys 5.3, girls 7.8. Pond, in his study of Pennsylvania drop-outs, made during the period between 1949 and 1953, gave the following percentages of the 4,863 secondary school students who said that "Trouble reading books" was their main, second, or third reason for leaving school. Reading difficulty was given as the main reason by 2.2 per cent of the boys, 1.2 per cent of the girls, 1.8 per cent of the total. It was given as the second reason by 6.3 per cent of the boys, 3.1 per cent of the girls, 4.9 per cent of the total. It was given as the third reason by 6.6 per cent of the boys, 6.2 per cent of the girls, 6.4 per cent of the total.¹⁶ George McGee, in a study of the holding power of a specific high school, gave the following data on one hundred graduates and one hundred non-graduates who were tested on the Metropolitan Reading Test at the end of the sixth grade:

Only 5 per cent of the selected graduates were reading more than two grades below grade norm; in the non-graduate group 29 per cent were more than two years retarded in reading and 56 per cent of the group were more than one year retarded in reading.¹⁷

McGee seems to have used the terms *retardation* and *reading below grade level* as synonymous; whereas reading retardation is usually defined as reading below mental age, not just below grade level. The fourth reference to reading in connection with school drop-out is found in the California Cooperative Study, *Now Hear Youth*.¹⁸ In answer to the question "How well do you feel that your school trained you in reading?" only three out of ten of the 1,500 drop-outs from the San Diego High School felt that they had had all the training they needed in reading, as compared with seven out of ten of the 3,000 graduates studied. The results showed definitely the greater concern of the drop-out student with his lack of preparation in these fundamental skills.

¹⁶Frederick L. Pond, "Pennsylvania Study of Drop Outs and the Curriculum," *Bulletin of the National Association of Secondary School Principals*, 37:86, March 1953.

¹⁷George A. McGee, "A Study of the Holding Power of Croton-Harmon High School with Proposals for Improvement." Doctor of Education Project Report. New York, Teachers College, Columbia University, 1952, p. 160. Typewritten.

¹⁸Kitch and McCreary, *op. cit.*, p. 36.

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NEED FOR FURTHER STUDY OF READING FACTOR

The small amount of available data which bear on reading achievement at the high school level, especially as related to early school leaving, substantiates the statements made by Earl J. McGrath in 1951:

Although we as schoolmen have many good hunches about effective ways to hold boys and girls in school, we have little valid evidence. Although considerable research has been carried on, no conclusive evidence is available.¹⁹

Dr. McGrath concluded by encouraging the establishment of research design which offers promise of yielding valid answers in such areas as the educational needs of early school leavers and the effectiveness of the new programs and services introduced to meet their needs.

The prevalence of low reading ability among high school students points to the need for further investigation of the relation of reading ability to early school leaving. In the Battle Creek, Michigan, High School, first year students who entered the high school in the tenth grade between 1944 and 1951 had been tested in the ninth grade on the Iowa Silent Reading Tests, Advanced Form AM or CM.²⁰ It was found that 21 per cent of these sophomores were reading on the fourth or fifth grade levels; 33 per cent were reading at or below the sixth grade level. A large number of these students dropped out of school in the tenth grade and others left school in the eleventh or twelfth grades; only a few remained in high school until graduation.

With the purpose of contributing to the existing meager literature on the relation of reading achievement to the dropping out of high school students before graduation, the following study was undertaken. It is based upon data collected in the Battle Creek High School during a four-year period between September 1947 and June 1952. While this study will have particular significance for the teachers and administrators in the Battle Creek Public Schools, it is hoped that it may also be of value to other teachers

¹⁹U.S. Office of Education, *op. cit.*, p. 3.

²⁰Harry A. Greene, Albert N. Jorgensen, and Victor H. Kelley, *Iowa Silent Reading Tests, Advanced Forms AM and CM*. New York, World Book Company, 1943.

and administrators who are interested in the relation of reading to students' persistence in high school.

DEFINITIONS

For the purposes of this study *poor reader* or *reader with low reading achievement* will designate students who were reading in the lowest quarter of their class at the time of their last reading test.

The terms *good reader* and *reader with high reading achievement* will designate students who were reading in the highest quarter of their class at the time of their last reading test.

The terms *school leaver* and *drop-out* will be used interchangeably in referring to students who leave school before graduation.

The term *retarded readers* will be used to designate students between whose mental capacity and reading achievement there is marked disparity.

CONCLUDING STATEMENT

From the data collected, the reading achievement of the groups studied and the proportion of drop-outs and graduates among good readers and poor readers will first be reported. The group of poor readers will be studied more intensively with these questions in mind: What percentage dropped out of school? What percentage remained to graduate? At what times did they drop out of school? How did the drop-outs and graduates among the poor readers compare as to intelligence test scores? What was the reading growth potential of the poor readers who dropped out and those who graduated? How did a sampling of these two groups feel about themselves and their school subjects? What was their attitude toward reading and toward teachers? What were their relations with other students? What reasons did they give for leaving school or for graduating? These are some of the questions that will be answered in Chapter Three. In Chapter Four the first steps in developing a program to meet the need for improvement in reading will be described. Finally, some of the implications of the study for education will be mentioned.

Chapter
Two

METHOD AND DATA OF STUDY

TO ANSWER THE questions raised in the previous chapter, reading test scores for all pupils enrolled in the tenth grade over a four-year period were necessary. In addition, some instrument for measuring intelligence was required for a more intensive study of the poor readers. And to obtain more insight into why some poor readers graduated while others dropped out of school, it was necessary to use the interview technique. These methods and instruments will be described in this chapter.

DESCRIPTION OF SUBJECTS

A total of 2,384 students were enrolled in the tenth grade of the Battle Creek High School between September 1947 and September 1950. Of these, the following two groups were studied: (1) 593 tenth grade students who were in the lowest quarter of their class at the time of their last reading test (of these, there were 296 who dropped out of school, 270 who remained to graduate, 27 who transferred); (2) 593 tenth grade students whose scores were in the highest quarter of their class at the time of their last reading test (of these, there were 86 who dropped out of school, 481 who remained to graduate, 26 who transferred).

The low scoring group was studied further. Intelligence test scores for 276 drop-outs and 270 graduates in the low reading

group were available. For 154 of these drop-outs and 138 of these graduates, reading test data on *comparable forms of the same tests* were available. This made possible further comparison of the reading achievement of drop-outs and graduates who were poor readers.

All students who left school before graduation were interviewed by counselors. The data thus obtained were also used in this study.

More intensive study was made through interviews with sixty poor readers who dropped out of school from September 1947 to June 1951. This was approximately one-tenth of the 593 poor readers. The reading and intelligence scores of this group of drop-outs are given in Table I.

Table I.
READING AND INTELLIGENCE SCORES OF POOR-READER
DROP-OUTS INTERVIEWED

READING SCORES		INTELLIGENCE SCORES	
<i>Grade Level</i>	<i>N</i>	<i>Range</i>	<i>N</i>
		100-106	7
6.0-6.9	19	90- 99	17
5.0-5.9	26	80- 89	26
4.0-4.9	15	70- 79	6
		60- 69	4
Total	60	Total	60

A group of sixty poor readers who remained in school during the same years was also interviewed. Their reading test scores were practically the same as those of the group of drop-outs. Their intelligence test scores were slightly higher—three more in the 100-106 range, four more in the 90-99 range, six less in the 80-89 range, and one less in the 70-79 range. Among these graduates there were none with I.Q. below 70.

An exploration was also made of the effect of reading instruction on school leaving. Included in this study were 106 poor readers who remained in high school until graduation but had

received only incidental help in reading and forty-eight who received special help in reading in the ninth and tenth grades.

DESCRIPTION OF INSTRUMENTS

Intelligence and reading tests, "exit" interview sheets, interview sheets for school leavers, and interview sheets for graduates comprised the materials which were used for the study.

Intelligence quotients based on the Otis Tests of Mental Ability, Intermediate Form A,¹ were used throughout the study. These tests had been administered to the students when they were in the ninth grade in October 1946, 1947, 1948, and 1949.

Reading test scores based on the Iowa Silent Reading Tests,² Advanced Form AM or CM, were used in connection with the study of the reading achievement of all of the students with the exception of forty-eight students for whom the California Reading Tests,³ Intermediate Form AA and Advanced Form AA, were used. The Iowa Silent Reading Tests were administered to 125 of the poor readers and 125 of the good readers in October 1947 when they were in the tenth grade, and to the remainder of the students in October 1947, 1948, and 1949 when these students were in the ninth grade. During their senior year, in March 1950 or March 1952, a retest was administered to the 106 students who were compared with the forty-eight students who had had some special instruction in reading.

The total score on the Iowa tests is a grade level score which indicates the month in the grade at which the student is reading at the time of taking the tests. The grade level score is based upon the cumulative performance of the student on the subtests.

The subtest scores measure reading achievement in rate (Test 1-A), comprehension of social studies and science material (Test 1-B), directed reading (Test 2), poetry comprehension (Test 3),

¹Arthur S. Otis, *Otis Self-Administering Tests of Mental Ability*. Yonkers-on-Hudson, New York, World Book Company, 1922.

²Harry A. Greene, Albert N. Jorgensen, and Victor H. Kelley, *Iowa Silent Reading Tests*. Yonkers-on-Hudson, New York, World Book Company, 1943.

³Ernest W. Tiegs and Willis W. Clark, *California Reading Test*. Los Angeles, California, California Test Bureau, 1950.

word meaning (Test 4), sentence meaning (Test 5), and paragraph comprehension (Test 6).

The rate of reading subtest score is the average number of sentences read per minute. The remaining subtest scores are the numbers of right answers from the respective reading exercises. The maximum possible number of right answers for each subtest is indicated in Table IV (see page 23).

Exit interview sheets, which are prepared in the Battle Creek High School by counselors for all students who leave school before graduation, were used to study the reasons given by counselors and students for the school leaving of the drop-outs. The counselor draws upon his total acquaintance with the boy or girl who is leaving school when he makes out the report. A copy of an exit sheet may be examined in Appendix A.

Interview sheets for school leavers and for graduates were prepared as guides for interviewing the students. These interview guides provided for free responses and also for specific questions to make possible comparisons between drop-outs and graduates on certain points.

The interview sheets for school leavers provided first for a free response with regard to the former student's real reason for leaving school. Questions were then asked to determine his attitude toward other students, his attitude toward his teachers, and the degree to which he participated in extracurricular activities when he was in school. One direct question as to whether he had had trouble in reading when he was in high school was asked, and if his answer was in the affirmative he was asked to describe his trouble. Several other questions were designed to probe for reading difficulties. Among these questions were some related to the subjects liked and disliked, kinds of trouble experienced in using ideas, amount of participation in class, avenue of learning most necessary for success in school, length of time to do school work in comparison with other students, and feelings toward reading. A question was included to give opportunity to the school leaver, if he had had difficulty in reading when he was in high school, to express his feelings toward himself. He was also asked whether he thought he would have enjoyed high school more if he had received help in reading. The final questions had to do with his

parents' feelings and his own feeling about his leaving school, and his reaction to his work experience.

The interview sheet for graduates was almost identical to that for drop-outs except that the questions with regard to drop-out from school were replaced by questions with regard to graduation. The graduate was asked what he thought were the main reasons that he had continued in school until graduation even though he had had trouble with reading. He was also asked how his parents felt about his graduation and whether or not other members of his family had finished high school. Copies of the interview sheet for school leavers and the interview sheet for graduates may be examined in Appendix B.

THE INTERVIEW

Approximately 90 per cent of the interviews with the drop-outs were conducted in the homes of the young people after appointments were made by telephone. The remaining 10 per cent were conducted in a private office in the Y.W.C.A. building. The seventeen graduates who completed high school in 1952 were interviewed in a private office in the high school building during the last month of their senior year. The remaining graduates were interviewed in their homes. With the exception of the interviews held in the school, all of the interviewing was done during the summer months of 1952 and 1953.

The introductory approach with the out-of-school young people who were interviewed was somewhat like this:

"You have undoubtedly received the follow-up questionnaires which were sent to you from the high school from time to time to determine how you are getting along and also to help us to improve our high school. You have given us some good suggestions about how we can improve the school program. We are experimenting with the plan of visiting with a few of our former students about their experiences when they were in high school, in order to get ideas that might be helpful to young people now in school. We are anxious to make school experiences so satisfactory to students that they will want to stay in school until they graduate."

The interviewer encouraged free response during the interview

and recorded suggestions for general school improvement. She made the effort to conduct the interview informally. She did not rigidly follow the order of questioning on the interview sheet, but gave opportunity to the former students to volunteer answers. To prevent ideas from being lost, the interviewer asked permission to make notes on the interview sheets.

After the interview, the young people who were being visited were told that more help in improving reading skill was now being given to students in the high school. They were made to feel that their evaluation of the reading program would be as valuable to the faculty and administration as was the evaluation of the students currently enrolled in the high school.

Chapter
Three

THE DATA:
DROP-OUTS AND
GRADUATES

THE DATA COL-
lected by the methods described in the previous chapter throw light on the relation of reading ability to school leaving. We first see how the poor readers compare with the good readers with respect to persistence in school. Next, we examine a group of poor readers to see whether there is any difference in reading ability between those who leave school and those who remain to graduate. We study this group still further to find out whether those who graduate improve in reading ability during their high school years. We should have liked also to compare a group who had only incidental instruction in reading with others who were in classes in which reading help was given, but the use of different tests made the results of such a study too difficult to interpret.

To supplement the statistical study of reading proficiency of drop-outs and graduates, we will examine the reasons for leaving school given by the students and their counselors in exit interviews and the free responses and answers to specific questions given by the students interviewed by the investigator. These replies show how the drop-outs and graduates feel about many aspects of school in general and about reading in particular. Since a student's self-concept often determines his behavior, these subjective replies are helpful in understanding more about the relation between reading achievement and school leaving.

READING ACHIEVEMENT OF GROUPS STUDIED

The total enrollment of sophomore students in the Battle Creek High School between September 1947 and June 1951 was 2,384. Of this total, the highest and the lowest fourth in reading ability were studied. Those whose reading scores placed them in the lowest quarter of their class will be called the *poor readers*; those in the highest quarter, the *good readers*.

Table II

RANGE OF READING GRADE SCORES OF TENTH GRADE STUDENTS
IN THE HIGHEST AND THE LOWEST QUARTER
OF THEIR CLASS IN READING

YEAR	NO. OF STUDENTS IN EACH QUARTER	RANGE OF READING GRADE SCORES	
		<i>Lowest Quarter</i>	<i>Highest Quarter</i>
1947-1948	125	4.3-6.9	9.0-13.0
1948-1949	143	4.3-6.5	9.6-13.0
1949-1950	168	4.3-6.1	9.4-13.0
1950-1951	157	4.3-6.1	9.0-13.0
Total	593		

Table II shows range in reading scores of the 593 poor readers and an equal number of good readers. The reading achievement of the poor readers covered a range from the third month of the fourth grade to the ninth month of the sixth grade. In other words, these tenth grade students were reading about three years or more below their grade level. In contrast, the good readers were reading from the beginning of the ninth grade to the beginning of the thirteenth grade, the grade at which the scoring on this test terminated. Although the reading achievement of some of this group on the Iowa Silent Reading Test was almost a year below their grade level, most of them were reading on or above their grade level, and some were scoring as well as college freshmen. The range of scores for the four years was remarkably similar.

20 · READING AND DROP-OUTS

DROP-OUTS AND
GRADUATES AMONG
POOR AND GOOD READERS

A glance at Table III shows in general a much larger percentage of drop-outs among the poor readers and a much higher percentage of graduates among the good readers. In fact, almost twice as many in the good reader group as in the poor reader group graduated. The total percentage of drop-outs was over three times as large among the poor readers as among the good readers. During the tenth grade the percentage of drop-outs was about fifteen times as large for the poor reader group as for the group of good readers. After the tenth grade, however, the difference in the percentage of drop-outs in the two groups was not so great. Statistically, the difference between the percentages of poor readers and of good readers who dropped out of school before graduation is significant at the .01 level. ($z = 13.20$; $z_{.995} = 2.58$.)

Table III
NUMBER AND PERCENTAGE OF TENTH GRADE STUDENTS—593
POOR READERS AND 593 GOOD READERS—WHO DROPPED
OUT OF SCHOOL BETWEEN SEPTEMBER 1947 AND JUNE
1951 BEFORE GRADUATION OR WHO REMAINED IN
SCHOOL UNTIL GRADUATION

	POOR READERS		GOOD READERS	
	<i>N</i>	%	<i>N</i>	%
Dropped out:				
During tenth grade	120	20.2	8	1.3
Upon completing tenth grade	38	6.5	13	2.2
During eleventh grade	68	11.4	31	5.2
Upon completing eleventh grade	22	3.7	21	3.6
During twelfth grade	48	8.1	13	2.2
Transferred (tenth, eleventh, twelfth grade)	27	4.6	26	4.3
Graduated	270	45.5	481	81.2
Total drop-outs	296	49.9	86	14.5
Total transfers	27	4.6	26	4.3
Total graduates	270	45.5	481	81.2
Grand Total	593	100.0	593	100.0

A further analysis of the 296 poor readers who dropped out of school during or immediately after each grade yielded the following information about the times at which the largest percentages drop out of school:

1. During the tenth grade—40.5 per cent; after completion of the tenth grade—12.8 per cent. During or after completion of the tenth grade—53.3 per cent.

The percentage of drop-out during the school year in the tenth grade was 68.4 per cent greater than after the completion of the tenth grade.

2. During the eleventh grade—23.0 per cent; after completion of the eleventh grade—7.4 per cent. During or after completion of the eleventh grade—30.4 per cent.

The percentage of drop-out during the eleventh grade was 67.8 per cent greater than the drop-out after the eleventh grade.

3. During the twelfth grade—16.0 per cent.

The percentages of the eighty-six good readers who dropped out of school during or after each grade are as follows:

1. During the tenth grade—9.3 per cent; after completion of the tenth grade—15.2 per cent. During or after completion of the tenth grade—24.5 per cent.

The percentage of drop-out during the school year in the tenth grade was 38.8 per cent less than that which occurred after the completion of the tenth grade.

2. During the eleventh grade—36.0 per cent; after completion of the eleventh grade—24.5 per cent. During or after the completion of the eleventh grade—60.5 per cent.

The percentage of drop-out during the school year in the eleventh grade was 31.9 per cent greater than that which occurred after the completion of the eleventh grade.

3. During the twelfth grade—15.1 per cent.

These findings indicate that a larger percentage of poor readers than of good readers dropped out of school during or immediately after the tenth grade. The percentage of drop-out of the poor readers during or immediately after completion of the tenth grade—the peak period of drop-out for poor readers—was 54.0 per cent higher than the drop-out of the good readers during this period. The percentage of drop-out of the poor readers during or

immediately after completion of the eleventh grade was 50.4 per cent lower than the drop-out of good readers during this period. The percentage of drop-out of the poor readers during the twelfth grade was 5.6 per cent higher than the drop-out of the good readers.

These figures also indicate that the percentage of drop-out during the school year was higher than the drop-out after the close of the school year with the exception of the drop-out among good readers during and immediately after the tenth grade.

This analysis further reinforces the impression of the preponderance of drop-out among poor readers. It also points to the tenth grade as a crucial time to prevent the poor readers from leaving school.

DROP-OUTS AND GRADUATES AMONG POOR READERS

We have now answered these questions: What is the proportion of drop-outs and graduates in groups of good and poor readers and at what times in their high school years do the largest percentages of good and poor readers drop out of school? The next question is: What are the percentages of drop-outs and graduates among the 593 pupils in the lowest quarter of their class in reading achievement?

What were the reading levels of this group of poor readers? In the tenth grade, 135 (5.7 per cent) were reading on the fourth grade level at the time of their last reading test, 366 (15.1 per cent) were reading on the fifth grade level, and 92 (4.0 per cent) were reading on the sixth grade level. During the four years studied, the percentage of students reading at the fourth, fifth, and sixth grade levels increased slightly. The *entire* number of this lowest quarter who were reading on the fourth, fifth, and sixth grade levels was 793, or 33.2 per cent of the entire enrollment of 2,384 tenth grade students.

READING SCORES

How do the graduates and drop-outs among the poor readers compare with respect to reading grade scores? As shown in

Table IV

TENTH GRADE TOTAL AND SUBTEST IOWA SILENT READING SCORES
OF POOR READERS—154 DROP-OUTS AND 138 GRADUATES

	READING SCORES				
	<i>Maximum Possible</i>	<i>Range</i>	<i>Mean</i>	<i>Highest Quartile</i>	<i>Lowest Quartile</i>
Test 1-A:					
Reading Rate,					
Soc. Stu.-Science					
Drop-Outs		5-39	20	26	15
Graduates		6-38	20	24	15
Test 1-B:					
Comprehension,					
Soc. Stu.-Science					
Drop-Outs	35	1-27	9	11	7
Graduates	35	0-22	9	12	7
Test 2:					
Directed Reading					
Drop-Outs	20	0-14	2	3	0
Graduates	20	0-14	2	3	1
Test 3:					
Poetry Comp.					
Drop-Outs	20	0-14	2	4	1
Graduates	20	0-10	3	4	1
Test 4:					
Word Meaning					
Drop-Outs	70	0-29	11	15	6
Graduates	70	1-24	12	15	9
Test 5:					
Sentence Meaning					
Drop-Outs	35	0-28	8	12	4
Graduates	35	0-28	9	12	4
Test 6:					
Paragraph Comp.					
Drop-Outs	36	0-28	12	15	7
Graduates	36	4-26	13	15	9
Reading Grade					
Level, Total Score					
Drop-Outs	13.0	4.3-6.9	5.5	5.9	4.9
Graduates	13.0	4.3-6.9	5.7	6.1	5.2

Table IV, in the tenth grade when they took the reading test, reading grade, range, mean, and quartiles were almost identical for drop-outs and for graduates. Statistically, the difference between the mean reading grade level scores of the poor readers who dropped out and those who graduated was not significant at the .05 level. ($t = 1.81$.) The slight differences obtained were in favor of the graduates.

Further study of the poor readers who graduated showed that they improved in reading as they continued in school.

This part of the study is significant in showing that initially poor readers may remain to graduate. For any number of reasons, such as family pressures, social satisfactions in school, help of teachers and counselors, desire to read better, and actual improvement in reading, boys and girls are able to complete their high school course.

Table IV also shows only slight differences on the subtests of the Iowa Silent Reading Test between those who dropped out of school and those who graduated. But we must remember that the subtests of the Iowa Silent Reading Test are short and their reliability correspondingly low.

INTELLIGENCE

What are the intelligence test scores of drop-outs and graduates? It will be noted in Table V that neither the difference between the range of intelligence quotients of the drop-outs and graduates, nor the difference between the quotients of these groups at the respective statistical points—the median, the mean,

Table V
INTELLIGENCE QUOTIENTS OF POOR READERS—DROP-OUTS
AND GRADUATES

INTELLIGENCE SCORE	<i>Drop-Outs</i> (<i>N</i> = 276)	<i>Graduates</i> (<i>N</i> = 270)
Range	53-116	51-120
Median	84.0	88.0
Mean	83.6	88.2
Highest quartile	90.0	93.0
Lowest quartile	77.0	81.0

the highest and lowest quartile—seem great enough to make much difference in the educability of these students. Statistically, however, the difference between the mean intelligence quotients of the poor readers who dropped out of school and the poor readers who remained to graduate is significant at the .01 level. ($t = 5.12.$)

In considering these intelligence quotients, it must be borne in mind that the Otis Test of Mental Ability, on which the quotients were based, is an instrument which requires reading ability. It may therefore be assumed that the students who had potential for growth in reading and who were tested on this test might have tested higher on a test which involved little or no reading. However, since both the drop-outs and the graduates who were poor readers were tested on the same test, it will serve to show how these two groups compare on this kind of mental task, requiring both quantitative and verbal ability.

READING ACHIEVEMENT AND INTELLIGENCE

What is the relation between reading achievement and intelligence quotient? As might be expected, the intelligence quotients of drop-outs and graduates among the poor readers, as shown in Table VI, increased for the most part with reading grade level.

The greatest difference between median intelligence quotients, in both the drop-out and the graduate groups, occurred between students who were reading on the fourth grade level and students who were reading on the fifth grade level. These findings were again within the realm of expectation.

Another method of studying the relationship between reading achievement and intelligence is that of studying the disparity between reading age, found by converting the reading grade level into reading age, and mental age, found by converting the intelligence quotient into mental age. This method yields the reading growth potential of the reader—the amount which it is possible for him to grow in reading ability before he attains the capacity of his mental age. Table VII shows the number and percentage of 546 tenth grade poor readers, drop-outs and graduates, by

Table VI
 INTELLIGENCE QUOTIENTS OF POOR READERS—DROP-OUTS
 AND GRADUATES—BY READING GRADE LEVEL

READING GRADE LEVEL	INTELLIGENCE QUOTIENTS			
	<i>Range</i>	<i>Median</i>	<i>Highest Quartile</i>	<i>Lowest Quartile</i>
Fourth Grade Reading Level				
Drop-Outs (N = 70)	53-115	76	83	69
Graduates (N = 51)	51-103	81	95	75
Fifth Grade Reading Level				
Drop-Outs (N = 160)	58-116	87	93	79
Graduates (N = 159)	64-112	88	94	82
Sixth Grade Reading Level				
Drop-Outs (N = 46)	65-117	87	93	84
Graduates (N = 60)	54-120	93	97	86

reading age and by mental age. Table VII also shows the reading growth potential of the students in these respective groups.

Ages are charted in eleven-month intervals in Table VII. However, the range of reading ages of all tenth grade poor readers was actually from 8-0 to 11-1. The largest number and percentage of both tenth grade drop-outs and graduates were reading at age 10-0 to 10-11 or on the 5.8 to 5.9 reading grade level. (See footnotes to Table VII.)

A comparison between reading and mental ages of the drop-outs and graduates in Table VII shows that a large percentage of the mental ages of the students in both groups far exceeded their reading ages. Data compiled apart from the table show that in the drop-out group 193, or 70 per cent, had mental capacity, as

Table VII. READING AGE, MENTAL AGE, READING GROWTH POTENTIAL OF POOR READERS IN TENTH GRADE*

YEARS AND MONTHS	READING AGE ^b				MENTAL AGE				READING GROWTH POTENTIAL			
	Drop-Outs		Graduates		Drop-Outs		Graduates		Drop-Outs		Graduates	
	N	%	N	%	N	%	N	%	N	%	N	%
17-0-17-11					0		1	0				
16-0-16-11					3	1	2	0				
15-0-15-11					6	2	10	4				
14-0-14-11					16	6	40	14				
13-0-13-11					45	14	67	26				
12-0-12-11					64	24	65	25				
11-0-11-11	4	1	8	3	69	27	47	16				
10-0-10-11	122	45	145	54	41	14	16	6				
9-0-9-11	90	32	82	30	20	7	15	6				
8-0-8-11	60	22	35	13	10	4	3	0.1	3	1		
7-0-7-11					1	0.3	1	0.3	1	0.3		
6-0-6-11					1	0.3	2	0.7	4	1	3	1
5-0-5-11									9	3	13	5
4-0-4-11									24	9	39	15
3-0-3-11									54	20	71	26
2-0-2-11									93	33	73	27
1-0-1-11									55	20	44	16
00-0									22	8	19	7
									11 ^c	4	8 ^c	3
Total	276	100	270	100	276	100	270	100	276	100	270	100

*This table should be read as follows: four drop-outs and eight graduates have a reading age of 11-0 to 11-11; 0 drop-outs and one graduate have a mental age of 17-0 to 17-11; three drop-outs have a reading potential of about eight years and three graduates have a reading potential of about six years.

^bReading Grade Level 4.3-4.9 (Reading Age 8-3-9-1); 5.0-5.9 (9-1-10-3); 6.0-6.9 (10-3-11-2); 7.0-7.9 (11-2-12-1); 8.0-8.8 (12-1-13-0); 9.0-9.8 (13-0-14-0); 10.0-10.9 (14-0-16-0); 11-1 (16-8); 11.3 (17-4).

^cEleven drop-outs and eight graduates over-fulfilled their potentials.

judged by the results of the Otis Intelligence Test, to read above the sixth grade reading level. Only thirteen, or 5 per cent, of the students in this group, instead of sixty-six, or 24 per cent, should have been reading at the fourth grade level; only twenty, or 8 per cent, instead of 166, or 60 per cent, should have been reading at the fifth grade level; and only thirty-three, or 12 per cent, at the sixth grade reading level.

In the graduate group, 228, or 84 per cent, had mental capacity to read above the sixth grade reading level. Only six, or 2 per cent, of the students in this group, instead of forty-two, or 15 per cent, should have been reading at the fourth grade level; only fifteen, or 6 per cent, instead of 159, or 59 per cent, should have been reading at the fifth grade level; and only sixteen, or 6 per cent, instead of sixty-nine, or 26 per cent, at the sixth grade level.

Only eleven, or 4 per cent, of the drop-outs among the poor readers had fulfilled their potential for growth in reading, as far as the Otis test showed. As measured on this intelligence test, which, it should be remembered, involves reading ability, a total of 265 drop-outs, or 96 per cent of all the students in this group, had potential for growth in reading ability—from three months to eight years and eight months.

Only eight, or 3 per cent, of the graduates had fulfilled their potential for growth in reading as far as the Otis test showed. The total of 262, or 97 per cent, of the students in this group had potential for growth in reading even as measured on an intelligence test involving reading. Drop-outs and graduates showed an almost equally high potential for reading growth.

THE DROP-OUTS AND GRADUATES SPEAK

To obtain information about the complex relation between reading and other factors, sixty poor readers who dropped out of school in the tenth grade were interviewed. This was approximately 10 per cent of the 593 students who were reading in the lowest quarter of their class. The interviews were held from one to six years after the students had left high school. The same number of the poor readers who graduated were also interviewed either during the last month of

their senior year in high school or within two years after their graduation from high school.

SUBJECTS LIKED

The subjects which the drop-outs liked best were those which required little reading ability. Those mentioned most frequently were physical education, the course called Basic Living, typing, shop, home economics, and mathematics. Although the graduates, too, expressed a preference for shop work and home economics, they also mentioned courses requiring more reading. Among the subjects for which the greatest number of graduates expressed liking were United States history and civics; these subjects were not taken by the drop-outs. The graduates expressed liking for auto mechanics, however, as frequently as they expressed liking for civics.

The reasons given by drop-outs and graduates for liking subjects were similar. They were largely: (1) their practical value, (2) ability to do the work, (3) good relations in the classroom, and (4) importance of subject.

Some of the specific comments were: "Actually learned how to make things," "It prepared me for a vocation," "Practical," "Could do the work," "I like working with my hands; I am good at that," "History and civics are hard; I did shop work better," "Liked the kids best in that class," "Discussion of home relations good; got better acquainted in that class," "Learned how to get along with people better," and "Teacher helped me to overcome timidity." Although many of the reasons for liking subjects which the drop-outs and graduates gave were the same, they were given in different frequency. The order in which the drop-outs gave these reasons was: (1) their practical value, (2) good relations in the classroom, (3) ability to do the work, (4) importance of subject. In turn, the graduates gave the reasons in this order: (1) their practical value, (2) ability to do the work, (3) importance of subject, (4) good relations in the classroom.

SUBJECTS DISLIKED

The subjects which the drop-outs and the graduates disliked most were those which required reading ability. English was the

subject for which the drop-outs expressed dislike the greatest number of times; mathematics and world history were in second and third places among the subjects disliked by the drop-outs. Even though some of the graduates had expressed liking for history, a still larger number said they disliked this subject.

Most of the reasons for disliking English, history, and other content subjects given by both the drop-outs and the graduates referred to their difficulty in reading or writing in these subjects. The following quotations are typical of their comments:

Difficulty with reading and writing.
 I can't read very well.
 Had to read too much.
 Read history four or five times and got nothing from it.
 Couldn't spell.
 Couldn't understand what I read.
 There were too many hard words.
 Book reports were hard for me.
 Didn't like to give book reports before the class.
 Didn't read the right sorts of things.

All of the reasons given by the drop-outs for disliking English, world history, and world problems described reading difficulties. (English is a required subject in high school; world history and world problems are elected subjects.) Likewise all but one of the reasons given by graduates for their dislike of history and civics referred to reading problems. Most of the reasons given by this group for dislike of English also related to reading difficulties.

TROUBLE ENCOUNTERED IN READING

Of the 60 drop-outs and 60 graduates who were interviewed, 42 drop-outs and 41 graduates reported that they had had trouble reading in high school, and 18 drop-outs and 19 graduates reported no trouble.

The kinds of reading difficulties experienced by the drop-outs and the graduates were similar in type, but varied somewhat in frequency of mention, as follows:

DROP-OUTS

Comprehension

Couldn't understand what I read. (16)

- Didn't get anything out of what I read. (8)
 I read history four or five times and didn't get anything out of it. (3)
 I tried to read out loud to help, but I had to read the same thing over
 and over again. (2)
 Didn't know what I read. (1)
 If not interested, I couldn't understand what I read. (1)

Remembering What Was Read

- Couldn't remember. (13)

Word Attack and Word Meaning

- Couldn't pronounce words. (4)
 Didn't know meaning of words. (2)

Organizing What Was Read

- Couldn't get ideas together. (1)
 Couldn't pick out main points. (1)
 Couldn't organize what I wanted to say. (2)

Concentration

- Couldn't keep mind on what I was reading. (4)

Slow Reading

- Read too slowly. (2)

Lack of Interest

- Not interested. (1)
 Depended on subject. (1)

GRADUATES

Comprehension

- Couldn't understand what I read. (12)
 Have had to reread frequently. (3)
 Read over and over again. (2)
 I read over the second time usually. (2)
 Had trouble with history and civics especially and went back for help
 after school. (2)
 The books were difficult. (1)

Word Attack and Word Meaning

- Couldn't pronounce words. (6)
 Didn't know the meanings of words. (5)

Slow Reading

- Read too slowly. (8)

Remembering What Was Read

- Remembering. (4)
 I jotted down ideas to help remember. (4)

Organizing What Was Read

Picking out important points. (5)

Getting important ideas together. (1)

Concentration

Couldn't concentrate. (4)

Other Reasons

Discouraged; felt I couldn't read. (1)

Missed out in fourth or fifth grade; just couldn't read. (1)

I put in words and turned them around. (1)

Trouble in comprehension was mentioned in first place by both drop-outs and graduates, although this trouble was mentioned more times by drop-outs than by graduates. Among other difficulties reported by drop-outs were these, listed in order of frequency: (1) remembering what was read, (2) word attack and meaning, (3) concentration, and (4) organizing what was read. Among other difficulties reported by graduates were the following, listed in order of frequency: (1) word attack and word meaning, (2) reading too slowly, (3) remembering what was read, and (4) organizing what was read. Having spent more years than the drop-outs in a school situation in which they experienced trouble with reading, might account for the graduates' greater emphasis on difficulty with word attack and meaning and the handicap of slow reading.

TROUBLE USING IDEAS
GAINED FROM READING

The numbers of drop-outs and graduates who reported trouble in using ideas gained from reading were nearly the same: 40 drop-outs and 38 graduates. There were 16 drop-outs and 14 graduates who reported no trouble; and 4 drop-outs and 8 graduates made no specific reference to such trouble.

The reasons for trouble in using ideas gained from reading were reported by drop-outs and graduates in the same order of frequency for the first three of the difficulties mentioned:

DROP-OUTS

Having to Talk About What They Had Read

Reciting. (5)

Not sure of myself. (5)

Shy. (4)

Taking part in discussion. (2)

Afraid of being laughed at. (2)

Afraid I didn't know. (2)

Afraid to recite. (2)

Self-conscious. (2)

Expressing self orally. (1)

Fear of not being right. (1)

Organizing Ideas

Thinking through what I wanted to say. (4)

(No specific reasons given.) (5)

Remembering What Was Read

Remembering. (8)

Getting the Ideas to Use

No trouble if I knew what I read. (4)

Not sure of what I read. (3)

Writing About Ideas

Writing ideas. (5)

Expressing self on paper. (1)

GRADUATES

Having to Talk About What They Had Read

Talking about ideas. (7)

Not sure of myself. (4)

Shy. (3)

Reciting. (2)

Taking part in discussion. (2)

Not sure of reading. (2)

Not sure of what to say. (1)

Disliked getting up before class. (2)

Organizing Ideas

Organizing what I read and wanted to say. (2)

Organizing ideas. (2)

(No specific trouble stated.) (2)

Remembering What Was Read

Remembering. (11)

Getting the Ideas to Use

Picking out important ideas. (3)

Not sure of reading. (2)

Not sure of history and civics. (2)

Writing About Ideas

Writing. (3)

Communicating what they had read was mentioned by both drop-outs and graduates as causing the most trouble. The drop-outs expressed more feelings of insecurity about talking in the class situation than did the graduates. They said they were "afraid of being laughed at," "afraid they didn't know," and "afraid of not being right." However, both groups said "Not sure of myself" most frequently when giving reasons for not talking about what they read. Some of the graduates interpreted this insecurity as "not being sure of what they had read." This interpretation for both groups is closely associated with remembering what was read and getting ideas to use. All of the reasons given involve deficiencies in reading skill.

PARTICIPATION IN CLASS DISCUSSION

Poor readers who graduated participated in class discussion much more frequently than did the poor readers who dropped out of school. While the reasons given for little or no participation seem to be very much alike for both groups, the drop-outs had much more intense feelings about their inadequacies. Only 7 per cent of the drop-outs, as contrasted with 29 per cent of the graduates, said that they asked questions, answered questions, or took part in class discussion every day. The frequency with which both groups participated in class discussion is as follows:

	60 DROP-OUTS	60 GRADUATES
Every period	4	17
Once or twice a day	0	6
Once or twice a week	12	26
When called on	20	5
Almost never	24	6

Only 20 per cent of the drop-outs, in contrast to 43 per cent of the graduates, indicated that they took part in class discussion once or twice a week. There are even more significant differences between the two groups in the percentage who recited only when they were called on and who never participated in class discussion. Among the drop-outs, 33 per cent recited only when called on; whereas only 8 per cent of the graduates reported such limited participation. An even larger percentage (40 per cent) of the drop-outs said that they almost never took part in class discus-

sion; whereas only 10 per cent of the graduates reported similar lack of participation.

The reasons given by drop-outs and graduates for not taking part in class discussion are similar to the reasons given by both groups for not using the ideas which they had gained from reading. Feeling shy and self-conscious and not being sure of what to say seemed to be the main reasons that students did not participate in class discussion. These were typical expressions: "Afraid I would be asked something I didn't know," "Afraid of saying the wrong thing," "Afraid I didn't know the right answer," "Afraid of being laughed at," "Afraid my answers would sound silly; I didn't understand what I read."

FEELINGS OF POOR READERS TOWARD SELF

The feelings of drop-outs and graduates about themselves in relation to other students because of their reading difficulties are further indicated by the number of poor readers—drop-outs and graduates—who thought it took them longer than other students to prepare their work: 40 drop-outs and 33 graduates. Seventeen drop-outs and an equal number of graduates felt it took them no longer than other students; and 3 drop-outs and 10 graduates had no opinion about this.

In the drop-out group, 8 per cent more students than in the graduate group thought that it took them longer than other students to do their work. The students who responded to the question by saying that they did not know whether it took them longer than other students to do their work, may have been expressing an honest opinion, or they may have been evading the issue.

All of the reasons given by both drop-outs and graduates for taking longer than other students to do their work refer to difficulties in reading. They stated these reasons as follows:

DROP-OUTS

Slow reader. (8)

Trouble with reading. (7)

Can't read very well. (4)

Trouble with reading; had to read over and over again. (3)

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- Had to read history four or five times. (2)
 Depended on subject; if I had to read, yes. (1)
 Didn't study much. (1)

GRADUATES

- Slow reader. (14)
 History and civics took longer. (6)
 It took longer to read and study. (3)
 English and book reports took longer. (3)
 Had to read several times. (2)
 Had to read over and over until I got it. (2)
 Had to take notes when I read; that took more time. (1)

More drop-outs than graduates felt inferior, were ashamed in class, and wanted to leave school because of their reading difficulties. They expressed these feelings most frequently:

	DROP-OUTS	GRADUATES
Ashamed in class.	17	4
Had desire to learn to read better.	16	24
Wanted to leave school.	14	4
Felt inferior.	11	7
Tried hard to get information from discussions, films, etc.	11	12
Thought I could learn to read better and asked for help.	10	5
Knew I could do some other things, so I didn't care about not reading well.	5	4

Other feelings expressed by drop-outs were: "Discouraged with self" (2) and "Thought other students would make fun of me" (1).

Other feelings expressed by graduates were: "Discouraged with self" (2), "Timid, not sure of self" (2), "Self-conscious" (2), "Had fear of reading aloud" (1), and "Fear of being laughed at" (1).

More graduates than drop-outs expressed the desire to learn to read better; 40 per cent of the graduates and 27 per cent of the drop-outs stated this desire. More drop-outs than graduates asked for help with reading. As a matter of fact, the drop-outs did receive slightly more help than the graduates, and therefore more students in this group realized that such help could be provided. About the same number of students in each group tried harder to get information from discussion and films. A small number of drop-outs and graduates said that they knew that they

could do some other things well, so didn't care about not reading well. A larger number of drop-outs (31) as compared with graduates (19) expressed lack of self-esteem and feelings of timidity, self-consciousness, and ridicule.

HELP WITH READING

More than three fourths of the poor readers who were interviewed reported that they had received no help in high school in finding reading material that they could understand, or in otherwise improving their reading ability. About the same proportion said they had not been helped to accept their reading handicap and make the best use of their other abilities. There was not much difference between drop-outs and graduates in these respects.

The small differences between drop-outs and graduates with respect to help in reading are shown in the following figures. Among the students interviewed, 73 per cent of the drop-outs and 78 per cent of the graduates had received no help in finding reading materials which they could read; 85 per cent of the drop-outs and 87 per cent of the graduates had received no other help in improving their reading ability; and 78 per cent of the drop-outs and 85 per cent of the graduates had received no encouragement in making the best use of their other abilities and not being too disturbed about their reading difficulties. The small difference between the amount of help in reading received by the drop-outs and that received by the graduates seemed to be due to the Basic Living course, a required subject for all sophomore students, which was organized in the Battle Creek High School in September 1948, but not taken by the 1950 seniors who were interviewed. Some teachers of this course provided the students in their classes with books and pamphlets written on their reading levels. The Basic Living teachers also helped the students in their classes to understand themselves better and to accept their shortcomings.

The assistance given to poor readers by other school personnel seemed to be limited to help given by the school librarian in locating books which they could read and by a few English and history teachers who gave instruction in finding the main thought in paragraphs, in outlining, and in note-taking. Providing opportunity to read aloud in class was considered by several students

to be a questionable method of giving help in developing reading ability, and perhaps even a detriment.

Large percentages of both drop-outs and graduates who were interviewed expressed the belief that they would have enjoyed high school better if they had received help in improving their reading ability: 70 per cent of the drop-outs and 68 per cent of the graduates expressed this belief. Some of the comments of these poor readers on this question were:

DROP-OUTS

Yes, that is what put me behind.
 Surely would have helped me.
 Yes, in history especially.
 Yes, I do not know how to study.
 Yes, and in the lower grades too.
 Better before entering high school.
 I had a tutor outside of school until I went into the army.
 A special teacher helped me after I left school.

GRADUATES

Would have made all the difference in the world.
 Would have understood books better.
 Would have understood more.
 Also more help in grades one through nine.
 More help in lower grades.
 Would have enjoyed history and civics more.
 Could have understood history better.
 Reading is of much value.
 More help and easier tests.
 I liked it anyway; I liked the kids.

The comments made by both groups bespoke the sincere desire of these young people for this type of help. Some members of both the drop-out and graduate groups gave the opinion that help with reading should be given not only in high school but in the junior high school as well, and that more help with reading should be given in the elementary grades.

ATTITUDES TOWARD READING

The answers given by both drop-outs and graduates to the question "What is your general feeling toward reading?" are well

represented by these comments: (1) "I enjoy what I can read and understand," (2) "I would like to read, if I could read better," (3) "I like to read now, but I disliked to read in high school," (4) "I am still trying to learn to read better," and (5) "I have trouble with reading, so I dislike it." Only twelve drop-outs and six graduates voiced a definite dislike for reading. Of these students, four drop-outs and five graduates attributed their dislike for reading to difficulty which they encountered in reading. Most of the drop-outs and graduates were doing some reading because they liked to read. The kinds of magazines and books being read by the drop-outs contained easy vocabulary and pointed to effort on the part of these poor readers to find material which they could read and also to the need for having sights raised in evaluating content of material read. Mystery stories, detective stories, fiction, newspapers, and homemaking magazine articles constituted most of the reading of the young people who had dropped out of school. The reading done by the graduates included—in addition to mystery stories, detective stories, fiction, and newspapers—biography, history, books on science and travel, and articles not contained in newspapers about politics, current events, sports, and religion.

Among the nine young people who expressed a dislike for reading because of the difficulty which they had had with it, two of the drop-outs and two graduates remembered first having trouble with reading in junior high school, two drop-outs and two graduates remembered first having trouble in the fourth and fifth grades, and one drop-out said that he had always had trouble with reading.

ATTITUDES TOWARD OTHER STUDENTS

Approximately the same number of drop-outs (33) as of graduates (35) responded that other students in the high school were friendly. The drop-outs made comments such as "The majority of the group were very friendly." The graduates seemed more enthusiastic, using such expressions as "Very nice," "Kids were swell," "They were wonderful."

Among the drop-outs, however, twenty-one stated definitely

that other students in the high school were not friendly, whereas the seven graduates who expressed this opinion made such moderate comments as: "Some thought they were better than others," "Some were cliquish and snobbish," "Some were snippy and stuck-up," "Some were uppish," "Kids who belonged to cliques were hard to talk with," "City and country kids didn't mix."

The graduates also expressed a more conservative evaluation of other students by stating in larger numbers (18) than the drop-outs (6) that *some* of the students were not friendly. This answer may also have implied that the young people who remained in school had more friends than did the young people who had dropped out of school in the tenth grade. One graduate said, "I had my own group; I didn't worry about others." More members of the graduate group also attributed their negative feelings toward other students to their own inadequacies. "They were all right; I was shy in meeting them," said one girl.

ATTITUDES TOWARD TEACHERS

Although the poor-reader graduates had a longer period of time in which to get along with teachers, a few more graduates than drop-outs reported having had good relations with teachers:

	60 DROP-OUTS	60 GRADUATES
Got along well	48	51
Got along quite well	4	3
Trouble with one or two teachers	7	3
Did not get along	1	3

The difference in the numbers of students in the two groups who said they had good and poor relations with teachers was very small, however.

Some of the drop-outs' comments about relations with teachers were: "Enjoyed the teachers," "They were nice," "Gym teacher picked on me; nothing I did was right." Graduates made such comments as these: "Got along all but last year," "Just clothing teacher; I liked her, but she didn't like me," "Some misunderstandings," "Got along except for feelings inside about a few."

PARTICIPATION IN
ACTIVITIES

A much larger number of graduates than of drop-outs participated in both in-school and out-of-school clubs and other activities:

		60 DROP-OUTS	60 GRADUATES
In School:	No	54	26
	Yes	6	34
Out of School:	No	57	50
	Yes	3	10

Among the graduates, 64 per cent belonged to in-school clubs or other activities and 17 per cent belonged to out-of-school groups. Only 10 per cent of the drop-outs belonged to in-school clubs or other activities and only 5 per cent belonged to out-of-school groups.

The reasons given by the drop-outs and the graduates for not belonging to clubs or other groups outside of classes were as follows:

DROP-OUTS

Work. (12)

Felt I didn't belong. (8)

I didn't want to belong to any; not interested. (8)

Not there long enough. (8)

Lived in the country. (4)

No time for clubs. (3)

Didn't know enough about them. (2)

Would like to have belonged to Glee Club, but didn't have the right clothes. (1)

Didn't see any sense to them. (1)

GRADUATES

Work. (15)

Not interested. (4)

Helped at home. (3)

Lived in the country. (2)

Took the school bus. (2)

The largest number of reasons given by drop-outs for not belonging to out-of-school groups revealed feelings of not belonging, of not knowing students with whom to attend activities, of not

having interest in such activities, or of not knowing how to join the groups. In contrast, the largest number of reasons for non-membership in out-of-class groups given by graduates referred to conflicting work programs. It must again be considered that the graduates had a longer time in school in which to join groups and that they also had a longer time in school in which to overcome the natural timidity of tenth grade students.

REASONS FOR DROP-OUT

The reasons given on the exit sheets by counselors did not always agree with the reasons given by the tenth grade students themselves at the time of leaving school. The reasons given by counselors and students were the same in thirty-one instances; in twenty-nine instances, the reasons given by counselors and students were different. Work, lack of interest, dislike of school, plan to join the army or navy, and marriage were the reasons given in the greatest numbers by drop-outs at the time of leaving school. Among the reasons given by counselors for the students' leaving school were: failure of school to supply work adapted to students' interests, abilities, and needs; students' feeling of insecurity in school situation; discouragement over school work; more enjoyment of work outside of school; economic status of the home; and lack of home interest and support.

In very few cases were the reasons given on the exit sheets by students at the time of leaving school like the reasons given by these young people from one to six years afterward. Only five of the students who dropped out of school gave the same reasons at the time of leaving school that they gave later in interviews. The type of answer given at exit was, in most instances, one which was acceptable and which permitted easy escape. Reasons selected from those given by drop-outs in interviews throw light on some of the underlying problems which caused them to leave school. The following are selected from reasons given by drop-outs with intelligence scores of 90 or above:

Boy—I.Q. 92—Reading grade level 6.1. Exit reason: To enlist in the Marines. Statement made in the follow-up interview: "I was discouraged. I was not getting any place in school. I thought the Marines was a better place to be. I had difficulty with reading. I

couldn't remember what I read. I was often embarrassed in class."

Boy—I.Q. 95—Reading grade level 5.9. Exit reason: *Work.* Statement made in the follow-up interview: "I didn't think that I was getting any place in school. I was working part time at the Coca Cola Company and I wanted to work full time. I didn't think that I was learning anything. I had trouble reading and understanding assignments. I couldn't remember what I read and didn't like to recite as I wasn't sure of myself."

Boy—I.Q. 92—Reading grade level 4.3. Exit reason: *Lack of interest.* Statement made in the follow-up interview: "I had difficulty in reading. I did not feel sure enough of myself to contribute to class discussions. I broke rules and smoked on the way to the Youth Building for swimming. I didn't bother to try to get back into school after I was sent home. I wanted to learn to read better and went to a private tutor for help until I entered the army."

Girl—I.Q. 94—Reading grade level 5.2. Exit reason: *Marriage.* Statement made in the follow-up interview: "I didn't like school too well. I wanted to get married. I couldn't remember what I read. I didn't like to go to classes and be around other kids who seemed to learn easier than I did."

Girl—I.Q. 98—Reading grade level 6.7. Exit reason: *Work.* Statement made in the follow-up interview: "I was not getting along well in school; I was not happy there. I liked my part-time job, so I decided to work and not go to school. I read my history four or five times and got nothing from it. I was afraid to speak up in class. I didn't like class discussions as I couldn't remember what I read."

Girl—I.Q. 103—Reading grade level 6.5. Exit reason: *Tired of school; to move out of city.* Statement made in the follow-up interview: "I had difficulty with school work. My aunt in Tennessee wanted me to come and live with her. I didn't go there. I quit school and went to work. I couldn't get interested in English or history. I had trouble in reading. If I studied two or three days on an assignment, I could remember what I read. I felt inferior. I got the most from class discussions."

Boy—I.Q. 100—Reading grade level 5.1. Exit reason: *Work.*

Statement made in the follow-up interview: "I didn't like the kinds of things done in some classes. I liked auto mechanics, so I quit school to go into garage work. I had difficulty in English and history. I got E's in those subjects."

Girl—I.Q. 93—Reading grade level 5.0. Exit reason: "*Didn't feel like coming to school.*" Statement made in the follow-up interview: "I wasn't interested in school because I had no friends. No one cared whether I came to school or not. I liked typing, but I wasn't a good speller, so I made too many mistakes. I couldn't find anything interesting to read in school. I read some things now; I couldn't remember what I read in school. I was afraid to recite in class. I got a job at a drive-in when I left school. I felt all right out of school. I felt sick a lot of the time when I was going to school; guess part of it was that I didn't like school."

Girl—I.Q. 95—Reading grade level 6.1. Exit reason: *Work.* Statement made in the follow-up interview: "I just didn't care for school, except I liked Foods and Typing. I sometimes had difficulty understanding English. I had no interest in reading whatsoever. I could read and read and get nothing out of it. I couldn't remember what I read either. I believe that I could have enjoyed school better if I had had help in reading. That is what put me behind."

Boy—I.Q. 90—Reading grade level 6.9. Exit reason: *Work.* Statement made in the follow-up interview: "I was working part time as television installer. There was a chance to work full time, so I took it. I wasn't very good in school. I got all D's. History and English were hardest for me. I didn't like them; my best subjects were shop subjects. I didn't like to read the kinds of things we read in school. I read some now once in a while."

These were reasons given by drop-outs with intelligence scores below 90:

Boy—I.Q. 81—Reading grade level 5.3. Exit reason: *Work.* Statement made in the follow-up interview: "I was discouraged, as I was not getting as much from the work as I would like to have gotten. I was not good in English. Spelling and reading were hard for me. I couldn't pronounce the words or write them."

Boy—I.Q. 82—Reading grade level 5.6. Exit reason: *Work.*

Statement made in the follow-up interview: "I left school because I had to help support my mother and I was under the impression that I was inferior to the rest of the kids because of my family's financial situation. I had trouble with reading, too. I couldn't keep my mind on it. I was afraid of being laughed at if I didn't know the answers. I would like to have read better and still would."

Girl—I.Q. 88—Reading grade level 6.0. Exit reason: "Don't like school; work for sister-in-law." Statement made in the follow-up interview: "I found school work hard. My sister-in-law was having a baby; she needed help so I quit."

Girl—I.Q. 86—Reading grade level 5.9. Exit reason: *Poor health.* Statement made in the follow-up interview: "I was nervous in school. I felt all right when I started to work in a factory. I had trouble in getting the ideas from my reading. The words bothered me, too. I didn't like to recite in class. I would rather write my answers than give them before the class."

Girl—I.Q. 89—Reading grade level 6.8. Exit reason: *Work.* Statement made in the follow-up interview: "I was working part time at Woolworth's. I liked working. I didn't like school. I thought school wasn't needed for a job good enough for me. I work at Weston's packing cookies now. Sometimes I wish that I had kept on in school. I didn't get along well with my teachers because I didn't do my work. English was hardest for me. I didn't understand what I read or remember it either. That was one of the reasons that I quit school."

Boy—I.Q. 81—Reading grade level 5.0. Exit reason: *Work.* Statement made in the follow-up interview: "I didn't like school. I would rather work. I didn't like to read. I would rather do other things. I couldn't get the assignments in school. I didn't understand what I read. I think that I would have gotten more from reading than from discussions if I could have read. I had trouble with reading. Words are hard to understand. I don't know what they are. I can't remember what I read. I got most from films and from the teacher."

Boy—I.Q. 71—Reading grade level 4.6. Exit reason: *Work.* Statement made in the follow-up interview: "I wasn't getting anything out of it. School was hard for me. I liked athletics, but

I couldn't keep up my eligibility. I didn't like English, spelling, or book reports. I had trouble with reading. I wasn't sure of myself."

Boy—I.Q. 80—Reading grade level 4.7. Exit reason: *Lack of interest; work.* Statement made in the follow-up interview: "I got into bad company, skipped, became discouraged, failed tests, didn't understand what I read. I didn't like English, writing, or book reports. I didn't like to recite. It took me longer to get my assignments than it did other kids, too."

Girl—I.Q. 78—Reading grade level 6.8. Exit reason: *Lack of interest.* Statement made in the follow-up interview: "I didn't like World Problems. It was hard to understand. It was hard for me to write my thoughts, too. I didn't like to recite, either. I didn't like to read in school. I don't like to read now. I would get my work better in school when the teacher read aloud."

Girl—I.Q. 89—Reading grade level 6.5. Exit reason: *Marriage.* Statement made in the follow-up interview: "We were always quarreling at home; I wasn't getting along in some subjects at school, either. I wanted to get married. I think now that marriage isn't always rosy. It is better for kids to finish school first. I understand what I read if I am interested in it. English and history were hard for me. I didn't know some of the words, so I couldn't understand what I was reading."

These statements made by poor readers during the interviews emphasize the multiplicity of reasons why boys and girls leave school before graduation. They also point out the influence which reading difficulty had in causing young people to make a decision to leave school when that difficulty caused them to fail subjects, to receive low grades, to feel inadequate, to feel that they were not able to learn through reading as did most of the other students in their classes, or to be otherwise affected emotionally.

It is evident that the students interviewed and the remainder of the group of 593 high school drop-outs whom they represent, all of whom were reading below the seventh grade level at the time of their last reading test, could not read with ease textbooks which teachers expected them to read in high school.

Yet, even when measured on intelligence tests which involve reading ability, all these students had potential for improvement

in reading skill. A student with an I.Q. of 95 (mental age 13-7) and reading on grade level 5.9 (reading age 9-9) had potential for growth in reading ability of 3-10 (three years and ten months). A student with an I.Q. of 82 (mental age 11-9) and reading on grade level 5.6 (reading age 9-10) had potential for growth in reading of 1-11 (one year and eleven months).

The family attitude toward education might have been a factor in determining whether or not young people stayed in school. Although definite tabulation was not made of the numbers of parents and of brothers and sisters of the sixty drop-outs interviewed who completed high school, most of the parents of this group did not complete high school and decidedly fewer of their brothers and sisters than of the graduates' brothers and sisters completed high school. When questioned with regard to the feelings of their parents about their leaving school before graduation, thirty-seven drop-outs said that their parents did not want them to leave school, six said that they had to make their own decision, and seventeen said that their parents did not care or were indifferent.

Among the group interviewed, twenty-nine said they wished they had stayed in school and seventeen said they were not sorry they had left school. These attitudes were influenced by a number of factors. Many of these students said they had felt the need for money while in school, had the feeling they could not dress as well as other students, and had felt ashamed of the home in which they lived.

REASONS WHY POOR READERS GRADUATED

In response to the interview question "What do you think are the main reasons why you have continued in school until graduation even though you had some difficulty in reading?" the following answers were given by graduates with intelligence scores below 90 who in the tenth grade were reading in the lowest quarter of their class, according to the score received on their last reading test:

Boy—I.Q. 81—Reading grade level 6.2 (sophomore), 7.4 (senior). Statement made in interview: "My Dad and my counselor encouraged me."

Boy—I.Q. 83—Reading grade level 4.3 (sophomore), 4.6 (senior).
Statement made in interview: "I liked classes, especially the discussions. I also liked band and physical education."

Girl—I.Q. 80—Reading grade level 4.4 (sophomore), 7.2 (senior).
Statement made in interview: "I had a deep desire to graduate. I am the only one in my family who did."

Boy—I.Q. 78—Reading grade level 4.4 (sophomore), 6.8 (senior).
Statement made in interview: "I made up my mind that I would go through."

Girl—I.Q. 89—Reading grade level 5.9 (sophomore), 7.7 (senior).
Statement made in interview: "I set the goal that I should graduate."

Girl—I.Q. 84—Reading grade level 5.6 (sophomore), 9.8 (senior).
Statement made in interview: "My own will."

Boy—I.Q. 69—Reading grade level 4.6 (sophomore), 5.9 (senior).
Statement made in interview: "I liked Auto Mechanics and school dances."

Boy—I.Q. 65—Reading grade level 5.0 (sophomore), 9.8 (senior).
Statement made in interview: "My personal desire."

Girl—I.Q. 69—Reading grade level 5.0 (sophomore), 5.6 (senior).
Statement made in interview: "Teachers were good to help me."

Girl—I.Q. 69—Reading grade level 5.0 (sophomore), 5.6 (senior).
Statement made in interview: "My mother and dad wanted me to. I liked the kids."

Boy—I.Q. 87—Reading grade level 5.0 (sophomore), 7.0 (senior).
Statement made in interview: "I had no desire to quit. I didn't have that much trouble with reading. I was doing well in other things."

Girl—I.Q. 82—Reading grade level 5.1 (sophomore), 5.9 (senior).
Statement made in interview: "My own desire. I was doing well in some subjects like typing, and my parents encouraged me."

Boy—I.Q. 70—Reading grade level 4.3 (sophomore), 5.9 (senior).
Statement made in interview: "I thought my diploma would help me to get a better job. I am the first child in my family to finish high school."

Boy—I.Q. 81—Reading grade level 4.6 (sophomore), 7.7 (senior).
Statement made in interview: "My desire to graduate. Club and sports were interesting to me."

Girl—I.Q. 84—Reading grade level 4.8 (sophomore), 7.4 (senior). Statement made in the interview: "Friends and teachers helped me. I have never thought of quitting. I had a good time in extra-curricular activities."

These were statements made by graduates with intelligence scores of 90 or above:

Girl—I.Q. 92—Reading grade level 5.9 (sophomore), 8.5 (senior). Statement made in interview: "Because I realized that you couldn't get much of a job if you did not graduate."

Boy—I.Q. 94—Reading grade level 5.9 (sophomore), 8.0 (senior). Statement made in interview: "My folks encouraged me. I liked auto mechanics. My own desire to graduate. I almost dropped out at the close of the eighth grade."

Girl—I.Q. 90—Reading grade level 5.5 (sophomore), 6.5 (senior). Statement made in interview: "I always planned to graduate from high school."

Boy—I.Q. 92—Reading grade level 5.0 (sophomore), 6.3 (senior). Statement made in interview: "My parents encouraged me. My liking for sports and people."

Girl—I.Q. 93—Reading grade level 4.8 (sophomore), 8.5 (senior). Statement made in interview: "My parents encouraged me."

Boy—I.Q. 90—Reading grade level 5.9 (sophomore), 11.7 (senior). Statement made in interview: "It was taken for granted that I would. My parents both finished high school."

Girl—I.Q. 102—Reading grade level 5.1 (sophomore), 8.4 (senior). Statement made in interview: "My promise to self and parents. Help of my counselor."

Boy—I.Q. 93—Reading grade level 4.9 (sophomore), 9.2 (senior). Statement made in interview: "I always had the desire. It was also my mother's plan."

Boy—I.Q. 105—Reading grade level 5.3 (sophomore), 10.0 (senior). Statement made in interview: "Always planned to. All of my family finished high school."

Girl—I.Q. 90—Reading grade level 4.8 (sophomore), 6.8 (senior). Statement made in interview: "My mother, father, and brother graduated. It was understood that I would. I liked activities and the kids. It was my own desire to graduate too."

Girl—I.Q. 95—Reading grade level 4.3 (sophomore), 6.8 (senior). Statement made in interview: "I liked school. I was never upset enough to be affected."

Girl—I.Q. 100—Reading grade level 5.6 (sophomore), 9.0 (senior). Statement made in interview: "My mother very much wanted me to graduate. My brother quit and she felt very bad about it."

Strong personal desire to graduate, encouragement of family, family expectation, interest in specific subjects, interest in sports and other extracurricular activities, desire for a better job, help of counselors and teachers, and liking to be with other young people are among the reasons that these graduates who had had trouble in reading gave for continuing through school until graduation.

Many of these students made gains in reading achievement. However, a study of the growth in reading achievement between the tenth and twelfth grades of 106 poor readers in the tenth grade who graduated from high school without special help in reading showed that 36 per cent gained only from one month to a year of reading age, 25 per cent gained only from one to two years of reading age, and fifty students, or 47 per cent of the group, had not fulfilled by the seventh month in the twelfth grade their potential for reading growth.

READING INSTRUCTION AND READING ACHIEVEMENT

To make a preliminary exploration of the effect of reading instruction on school leaving, the 106 poor readers who remained in high school until graduation, but had received limited help in reading, were compared with forty-eight poor readers who received special help in the ninth and tenth grades. Definite conclusions regarding the effect of the reading program cannot be drawn, since (1) these groups were not matched, (2) comparable forms of the same reading tests were not used to measure growth, and (3) the intervals at which the two groups were tested were not alike. Suffice it to say that there is some indication that the mean growth of the students who re-

ceived special help in reading, now juniors in high school, will be much greater in a thirty-five-month period than was the growth of the students who received only limited help.

It is also interesting to note that among the group of 106 poor readers who had received no special help in reading, fifty, or 47 per cent, of the students were not yet reading up to their potential in the twelfth grade; and twenty-eight of these fifty, or 26 per cent of the 106, were still reading below the seventh grade level.

A comparison between the drop-out in the tenth grade from a ninth grade group of 295 poor readers who received only limited help in reading, and the drop-out from a ninth grade group of 133 poor readers who received special help in reading, showed that 7 per cent fewer students dropped out during the tenth grade from the group which had received special help.

SUMMARY OF FINDINGS

A comparison of two groups of students—593 *poor* readers and 593 *good* readers—who were enrolled in the Battle Creek, Michigan, High School in a four-year period showed that more of the *poor* readers than of the *good* readers dropped out of school. More specifically, 296, or 49.9 per cent, of the *poor* readers dropped out of school before graduation; whereas only eighty-six, or 14.5 per cent, of the *good* readers dropped out of school before graduation. Statistically, the difference between the percentages of the *poor* readers and the *good* readers who dropped out of school before graduation was significant at the .01 level. ($z = 13.06$; $z_{.995} = 2.58$.) To look at it in another way, in the same groups of *poor* readers and *good* readers, 270, or 45.5 per cent, of the *poor* readers graduated from high school, whereas 481, or 81.2 per cent, of the *good* readers graduated from high school.

The peak of school leaving for the *poor* readers occurred during the tenth grade or immediately after completion of the tenth grade. During the tenth grade, 120, or 20.2 per cent, of the 593 *poor* readers dropped out of school and another thirty-eight, or 12.8 per cent, dropped out of school after the completion of the tenth grade. Among the 296 *poor* readers who dropped out of school before graduation, 53.3 per cent dropped out of school dur-

ing or immediately after completing the tenth grade. On the other hand, only eight, or 1.3 per cent, of the *good* readers dropped out of school during the tenth grade and an additional thirteen, or 2.2 per cent, dropped out of school after the completion of the tenth grade.

The findings also showed that the drop-out of *poor* readers exceeded the drop-out of *good* readers during and after completion of the eleventh grade and during the twelfth grade. The numbers and percentages of *poor* and *good* readers who dropped out of school during each of these periods were: eleventh grade—sixty-eight, or 11.4 per cent, of *poor* readers, and thirty-one, or 5.2 per cent, of *good* readers; after completion of the eleventh grade—twenty-two, or 3.7 per cent, of *poor* readers, and twenty-one, or 3.6 per cent, of *good* readers; twelfth grade—forty-eight, or 8.1 per cent, of *poor* readers, and thirteen, or 2.2 per cent, of *good* readers.

According to the Iowa Silent Reading Test scores, 793, or 33.2 per cent, of the entire group of 2,384 tenth grade students enrolled in the Battle Creek High School in the four-year period between 1947 and 1951 were reading on the fourth, fifth, and sixth grade levels in the ninth grade, at the time of their last reading test. In other words, one fourth of the ninth grade students were reading three or more years below grade level. Although this proportion seems large, there is reason to believe that it is representative of reading retardation in many other high schools throughout the country.

Among the 593 tenth grade students who were reading in the lowest quarter of their class in the four year period being studied (which group did not include all of the students reading on the sixth grade level), 135, or 22.8 per cent, were reading on the fourth grade level (4.0–4.11); 366, or 61.7 per cent, were reading on the fifth grade level (5.0–5.11); and 92, or 15.5 per cent, were reading on the sixth grade level (6.0–6.11).

The subtest scores on the Iowa Silent Reading Tests made by 154 *poor* readers who dropped out of school and by 138 *poor* readers who remained in school to graduate, were very similar for the drop-outs and the graduates. The six subtests selected for study yielded scores in reading rate, comprehension of social studies

and science material, directed reading, poetry comprehension, word meaning, sentence meaning, and paragraph comprehension. The mean scores on the subtests, except for word meaning, were practically identical for the two groups.

The reading grade total scores on the Iowa Silent Reading Test also showed similarity between the *poor* readers who dropped out of school and the *poor* readers who graduated. The range of scores was identical for these two groups (4.3–6.9), and there was only two months' difference between their mean scores (drop-outs 5.5, graduates 5.7). Statistically, the difference between the mean reading grade scores of the two groups of *poor* readers was not significant at the .05 level. ($t = 1.81$.) This finding emphasizes that half of the students who in the ninth grade were reading as poorly as those who dropped out of school found it possible to remain in school to graduate. Many of those who graduated improved in reading, but their improvement was not great enough to free them from difficulties with reading during their high school years. Other conditions must have influenced their persistence in school.

The difference between the mean intelligence quotients of the *poor* readers who dropped out of school and those of the *poor* readers who graduated, based on the Otis Test of Mental Ability, was not large enough to account for the difference in academic progress. The mean I.Q. of the graduates was 88.2 and of the drop-outs, 83.6. At the lowest quartile, the I.Q. of the drop-outs was 5.0 points lower than the I.Q. of the graduates (drop-outs 77.0; graduates 81.0). Statistically, however, the difference between the mean intelligence quotients of the *poor* and the *good* readers was significant at the .01 level. ($t = 5.12$.)

As might be expected, the intelligence quotients of drop-outs and graduates among the *poor* readers increased, for the most part, with reading grade level. In both the drop-out and the graduate groups, the greatest difference in intelligence quotients was found between the fourth and fifth grade readers. The median I.Q.'s of the readers in the group of drop-outs were: fourth grade reading level, I.Q. 76; fifth grade, I.Q. 87. For the group of graduates the medians were: fourth grade, I.Q. 81; fifth grade, I.Q. 88. A few of the students of very low I.Q. had reached their potential at the fourth grade reading level.

A comparison of reading age scores with mental age scores showed that 193, or 70 per cent, of the 276 *poor* readers in the drop-out group had mental capacity to read above the sixth grade level, yet practically none were reading above the sixth grade level. Only thirteen, or 5 per cent, probably would not have been able to read above the fourth grade level. Among the 270 *poor* readers who remained in school, 228, or 84 per cent, had mental capacity to read above the sixth grade level and only six, or 2 per cent, of this group probably would not have been able to read above the fourth grade level. In considering these data, it must be borne in mind that the Otis test, on which mental age scores were determined, is a test which requires reading ability. If a test which requires less reading ability had been used to measure the intelligence of the poor readers, then their mental ability scores might have been higher and their reading growth potentials still greater. It must also be borne in mind that no exact predictions can be made as to the amount of improvement which a student with a certain mental age can realize. Multiple factors enter into students' achievement. In other studies, students have developed in reading age much beyond their mental age as measured by group tests.

A preliminary exploration of the effect of reading instruction on school leaving among 106 *poor* readers who remained in high school until graduation and who received limited help in reading with 48 *poor* readers who received special help in the ninth and tenth grades gave some indication that the mean growth of the students who received special help in reading, now juniors in high school, will be much greater in a thirty-five month period than was the growth of the students who received only limited help.

A comparison between a ninth grade group of 295 *poor* readers who received only limited help in reading and a ninth grade group of 133 *poor* readers who received special help in reading showed that 7 per cent fewer students dropped out during the tenth grade from the group which received special help.

The responses given in interviews by sixty *poor* readers who dropped out of school and sixty *poor* readers who remained in school until graduation were very enlightening. They gave in-

formation not only about their experiences with reading, but also about their general personality adjustment.

The *poor* readers who dropped out of school reported that the subjects which they liked best were those which required the least reading. English was the subject which they liked least. However, other subjects involving reading, such as history and civics, were also named by graduates as the subjects liked least. The reasons given by both drop-outs and graduates for disliking history, English, and civics were primarily related to their difficulty in reading these subjects.

The numbers of drop-outs and of graduates among the *poor* readers who said that they had had trouble in reading was almost the same. Among the two groups, forty-two, or 70 per cent, of drop-outs and forty-one, or 68 per cent, of graduates reported trouble in reading. The same types of reading difficulties were named by both groups, although not with the same frequency.

In connection with the report of the reading difficulties of both drop-outs and graduates, consideration should be given to the potential for growth in reading of the students in these groups. With help in reading, a large percentage of the students who had become discouraged and had dropped out of school because of difficulty with reading, and also a large percentage of the students who had remained in school to graduate but had experienced difficulty with reading, could have developed in reading ability to the extent that reading would have been considerably less of a problem for them.

The question "Have you had any difficulties in using ideas obtained from your reading?" was answered in a similar manner by members of the two groups. Among the drop-outs, forty, or 67 per cent, and among the graduates, thirty-eight, or 63 per cent, indicated this kind of difficulty. The greatest difficulty of the students in both groups had been in talking about what they read, and a large percentage of each group said that their difficulty was based upon their not knowing what to say. This reason could be closely connected with the two difficulties which they mentioned next in order of frequency: remembering what was read and getting ideas to use.

The graduates participated in class discussion much more frequently than the drop-outs. Only 7 per cent of the drop-outs said that they asked questions, answered questions, or took part in class discussion every day; whereas 29 per cent of the graduates participated in these ways. There were even more significant differences between the two groups in the percentages who recited only when they were called on and who never participated in class discussion. Among the drop-outs, 33 per cent recited only when called on; only 8 per cent of the graduates limited their participation in this way. An even larger percentage of the drop-outs (40) said that they almost never took part in class discussion; whereas only 10 per cent of the graduates almost never took part. The reasons for little or no participation were very much alike for both groups, although the drop-outs had more intense feelings about their inadequacies. Both drop-outs and graduates gave shyness as their main reason for not reciting. The next three reasons for not reciting in class given by drop-outs were: "Couldn't remember what I read," "Not sure of self," and "Afraid I would be asked something I didn't know." The next three reasons given by graduates were: "Afraid of giving the wrong answer," "Not sure of self," and "Not sure of reading."

In the drop-out group, 8 per cent more students than in the graduate group thought that it took them longer than other students to do their school work. Among the drop-outs, 67 per cent thought that it took them longer than other students to do their work; thirty-three, or 55 per cent, of the graduates thought that it took them longer than other students to do their work. All of the reasons given for this feeling by drop-outs and graduates referred to trouble with reading.

The drop-outs' acceptance of self was more damaged by their reading difficulties than was that of the graduates. Many more of the drop-outs than of the graduates felt inferior, were ashamed in class, felt disgusted with self, or wanted to leave school because of their handicap. These feelings were experienced by forty-five, or 75 per cent, of the drop-outs and by only twenty-three, or 38 per cent, of the graduates.

A small number of drop-outs and of graduates minimized the importance of reading by saying that they knew they could do

some other things, so didn't care about not reading well. Several drop-outs and graduates tried harder to get information from discussions and films, but did not find these avenues of learning sufficient to compensate for their disability in reading.

Both drop-outs and graduates said that they had received a very limited amount of help in reading and very little encouragement in helping them to make the best use of their other abilities. They had received more help in finding materials that could be easily understood than in improving reading ability. However, 79 per cent of the drop-outs and 77 per cent of the graduates said that they had received no help in reading. They likewise recognized very little help in learning to make the best use of other abilities; 78 per cent of the drop-outs and 85 per cent of the graduates had recognized no such help. Among the drop-outs, forty-two, or 70 per cent, said they would have enjoyed high school better if they had received such help; forty-one, or 68 per cent, of the graduates responded in this way.

Only twelve drop-outs and six graduates voiced a definite dislike for reading, and of these four drop-outs and five graduates attributed their dislike to difficulty which they had encountered in reading.

Approximately the same number of drop-outs and graduates responded that other students in the high school when they attended were friendly. Among the drop-outs, however, twenty-one, or 35 per cent, stated definitely that students in the high school were not friendly, in contrast to three, or 5 per cent, of the graduates who expressed this negative opinion. More of the graduates, however, admitted that *some* of the students were not friendly.

The graduates more often expressed having had good relations with teachers than did the drop-outs, although the difference between the two groups in this respect was not large. Among the graduates, fifty-one reported that they had got along well with teachers and eight said definitely that they had had trouble. Among the drop-outs, forty-eight reported that they had got along well with teachers and twelve said that they had had some trouble with teachers.

There was a definite difference in participation in clubs and other groups outside of classes between drop-outs and graduates,

and the feeling of not belonging was expressed more times by the drop-outs than by the graduates as their reason for non-participation. No membership in out-of-class groups was reported by fifty-four, or 90 per cent, of the drop-outs; no membership was reported by only twenty-six, or 43 per cent, of the graduates.

The reasons given on the exit sheets by counselors did not always agree with the reasons given by the tenth grade students themselves at the time of leaving school. These reasons were the same in thirty-one instances and different in twenty-nine instances. Work, lack of interest, dislike of school, plan to join the army or navy, and marriage were the kinds of answers given at the time of leaving school; these were reasons that permitted easy escape from school. Only five, or 8 per cent, of these students who dropped out of school gave the same reason at the time of leaving school that they gave later in interviews. The reasons given in interviews emphasized the multiplicity of reasons why boys and girls leave school before graduation. They also pointed out the influence of reading in causing young people to make the decision to leave school, especially when that difficulty affected them emotionally, or when other pressures were also present.

Among the drop-outs, thirty-seven young people interviewed said their parents did not want them to leave school; seventeen said their parents were indifferent; and six said they had to make their own decision. The reasons given by the graduates for staying in school until graduation, even though they had experienced some difficulty in reading, included strong personal desire to graduate, encouragement of family, family expectation, interest in specific subject, interest in sports and in other activities, desire for a better job, help of counselors and teachers, and liking to be with other young people. More of the parents and brothers and sisters of the graduates than of the drop-outs had completed high school. The graduates lived in better homes, located in desirable parts of the city, than did the drop-outs, and they seemed less disturbed by financial problems. There was evidence of greater home support and home stability in the background of the graduates than in that of the drop-outs. Interview data also revealed that emotional and social adjustment of graduates was better than that of drop-outs.

In brief, this study of drop-outs in a senior high school shows a preponderance of poor readers among those who leave school before graduating. However, among the poor readers are some who graduate in spite of the reading handicap. These seem to be the students who have the support and encouragement of parents, teachers, and friends; who themselves have a drive to complete their high school course; who get enjoyment from school either from certain subjects or from clubs and other opportunities to be with friends. Both drop-outs and graduates have unrealized potential reading ability. With more effective instruction in reading they could improve their reading and find greater satisfaction in school.

Chapter
Four

THE READING PROGRAM

THE PREPONDER-
ance of poor readers among drop-outs raised this question: Would a reading program through which appropriate help with reading is given to all boys and girls in the high school tend to reduce the number of poor readers who drop out of school?

With the hope of improving the reading ability of all students enrolled in the high school and, thereby, of fostering scholarship, increasing the enjoyment of reading, and reducing drop-out, a Reading Program was started in September 1951 in the Battle Creek High School. Through workshop sessions, other types of large and small group meetings, and individual contacts, the effort was made to interest all members of the faculty in helping boys and girls to improve their reading skills. The author was appointed to coordinate the program.

Reference books and other materials for the use of teachers were ordered, and mimeographed materials on "Suggested Ways of Improving Reading Ability in Science, Social Studies, and Mathematics" and "Suggested Ways of Diagnosing Reading Difficulties, Improving Comprehension, Improving Rate of Comprehension, and Improving Word Attack and Vocabulary Skills" were prepared. Books, pamphlets, and other types of materials needed to facilitate the reading work with students were also examined and ordered during the fall semester.

The decision was made to put initial emphasis on reading in the tenth grade. The English teachers of the students enrolled in the

tenth grade classes accepted the main responsibility for the developmental program (as distinguished from the special remedial program), although the teachers of all subjects in the high school were encouraged to assume responsibility for developing reading skills particular to their own subject fields. The philosophy reinforced by the results of the study of drop-outs, and accepted by most of the teachers, was that it was possible for almost all students to improve their reading ability. At least some students enrolled in the tenth grade and reading on the fifth or sixth grade level might raise their reading ability to the seventh, eighth, or tenth grade level. The more able students, too, were included in the program. In September 1952 students in twelfth grade English classes were given help so that they might raise their reading ability to college level before they entered college, where greater demands would be placed upon them.

Materials on "Suggested Procedures in the Teaching of Tenth Grade Reading" and one on "Suggested Procedures in the Teaching of Twelfth Grade Reading" were prepared. Procedures used in the two grades were somewhat similar.

PROCEDURES AND MATERIALS USED IN THE TENTH GRADE

The Diagnostic Reading Tests, Survey and Word Attack Sections,¹ were given at the beginning of the semester in each tenth grade English class to supplement the California Reading Tests in determining the reading strengths and weaknesses of students.

On the basis of tests and observation of the reading difficulties experienced by students, some teachers divided their classes into three groups—a lower, an average, and an upper level reading group. The approximate reading grade levels of the respective groups were 4.0–6.0, 7.0–9.0, and 10.0 and above. Other teachers anticipated that working with groups would be very difficult for them, and merely assigned reading test exercises in accordance with the reading level of students and provided other kinds of

¹Committee on Diagnostic Reading Tests, Inc., *Diagnostic Reading Tests: Upper Level*. New York, The Committee, 1950.

differentiated reading materials to the students who were reading on very low and on very high reading levels. Much of the work of these teachers was done with the entire class working as a unit.

The developmental needs of students varied. Some students needed help in attacking new words; others in concentration, reading for main thought, important detail, and organizing what they read. Still others needed help in summarizing and reviewing systematically, and many were reading all types of material at the same rate and needed help in adjusting rate to type of material read.

Once a week, an exercise from *Study Type of Reading Exercises for Secondary Schools*² was assigned to all students in each class. These short exercises helped students to develop their speed and comprehension in reading while they read content which informed them of ways to improve their reading. The speed and comprehension scores received by students were recorded on charts mimeographed for this purpose. Immediately after the recording of the scores, articles from *SRA Better Reading Books 1, 2, and 3*³ were assigned to students. The books were assigned on the basis of the scores on the Diagnostic Survey Tests and of the California Reading Tests as follows:

<i>Diagnostic Survey Test</i>	<i>Reading Grade</i>	
<i>Total Score</i>	<i>California</i>	<i>SRA</i>
<i>on Survey Section</i>	<i>Reading Test</i>	<i>Better Reading Books</i>
22 or above	5.0 or above	Book 1
34 or above	7.0 or above	Book 2
45 or above	9.0 or above	Book 3

Since the answers to the questions in all three SRA books are uniformly lettered, the administration of the exercises was facilitated. Speed and comprehension scores on the SRA articles were also charted, on printed SRA progress folders.⁴

On the day after the administration of these reading tests, exercises from *Following Printed Trails*⁵ were used with students

²Ruth M. Strang, *Study Type of Reading Exercises for Secondary Schools*. New York, Bureau of Publications, Teachers College, Columbia University, 1935.

³Elizabeth A. Simpson, *SRA Better Reading Books*, Book 1, Book 2, and Book 3. Chicago, Science Research Associates, Inc., 1951.

⁴Elizabeth A. Simpson, *SRA Reading Progress Folders*. Chicago, Science Research Associates, Inc., 1951.

who were reading on grade levels 7.0 through 9.0. This text outlines specific methods for improving several reading skills and provides exercises to help the student achieve this improvement.

The reading materials used with the students who were reading on grade levels 4.0 through 6.0 included:

*Readers' Digest Skill Builder*⁶

Parts One and Two—Reading grade level 4.

Parts One and Two—Reading grade level 5.

Parts One and Two—Reading grade level 6.

Practice Readers,⁷ by Stone and Others.

Book I (Reading grade levels 4 and 5)—Reading for Direct Details, Implied Details, Meaning of the Whole, Correctness of Statement in Relation to the Selection.

Book II (Reading grade levels 5 and 6)—Reading for Direct Details, Implied Details, Meaning of the Whole, Correctness of Statement in Relation to the Selection, Understanding the Meaning of Reference Words, Perception of the Truth and Falseness of a Statement.

Basic Reading Skills for High School Use,⁸ by Gray, Horsman and Monroe (Primarily word attack help).

The more able readers who were reading on grade level 10.0 and above worked on increasing their reading speed, organizing material read, making précis or summaries, drawing conclusions, reviewing systematically, skimming, notetaking, outlining, and building vocabulary.

The reading materials used by the students who were reading on grade level 10.0 and above included:

Practices in Reading and Thinking,⁹ by Center and Persons. Reading grade levels 10 and 11.

Problems in Reading and Thinking,⁹ by Center and Persons. Reading grade level 12.

⁶Carol Hovious, *Following Printed Trails*. Chicago, D. C. Heath and Company, 1936.

⁷Readers' Digest Association, Inc., *Readers' Digest Skill Builder*. Pleasantville, New York, 1951.

⁸Clarence Stone, et al., *Practice Readers*. St. Louis, Webster Publishing Company, 1941, 1944.

⁹William Gray, Gwen Horsman and Marion Monroe, *Basic Reading Skills for High School Use*. New York, Scott, Foresman and Company, 1948.

¹⁰Stella Center and Gladys Persons, *Practices in Reading and Thinking*, 1948. *Problems in Reading and Thinking*, 1949. New York, The Macmillan Company.

All teachers strove to relate the reading skills which students learned through exercise material to the reading work which they did in their English units. In addition, they arranged English unit material on reading levels to provide for the reading abilities in their classes. They prepared lists of books, graded according to reading levels, from which students could select their out-of-class reading. They also brought into the classrooms, from the library, books on the interest and reading levels of students in their classes for free reading, such as the D. C. Heath series, *Teen-Age Tales*.¹⁰

PROCEDURES AND MATERIALS USED IN THE TWELFTH GRADE

The Diagnostic Survey and Word Attack Tests¹¹ were administered at the beginning of the semester in twelfth grade English classes. Since this English course was elective and taken primarily by College Preparatory Course students, the range of reading abilities of these twelfth grade students was not so wide as that of the tenth grade students. The teachers who taught these classes also preferred working with the students in one group. Therefore, only occasional grouping was done, based primarily upon reading skill needs, rather than upon reading ability.

The *SRA Better Reading Books 2* and *3*¹² were used during the first part of the year for weekly reading tests. These books were distributed on the basis of reading ability, as they were in the tenth grade. The SRA test exercises were preceded by the timed reading of an exercise from *Study Type of Reading Exercises for Secondary Schools*.¹³ These students also graphed their speed and comprehension scores, as did the tenth grade students. During the latter part of the semester *Selections for Improving Speed of Comprehension*¹⁴ was used for weekly test exercises by the better

¹⁰Ruth M. Strang and Ralph Roberts, *Teen-Age Tales*, Books I and II. Boston, D. C. Heath and Company, 1953.

¹¹Committee on Diagnostic Reading Tests, *op. cit.*

¹²Simpson, *SRA Better Reading Books*, *op. cit.*

¹³Strang, *op. cit.*

¹⁴William G. Perry and Charles P. Whitlock, *Selections for Improving Speed of Comprehension*. Cambridge, Mass., Harvard University Press, 1948.

readers. These short articles contain college level reading and exercises which emphasize thought and interpretation more than simple memory of detail.

Other materials used in the reading improvement of twelfth grade students included:

Practices in Reading and Thinking,¹⁵ by Center and Persons. Reading grade levels 10 and 11.

Problems in Reading and Thinking,¹⁵ by Center and Persons. Reading grade levels 12 and up.

Better Reading and Study Habits,¹⁶ by Kelley and Greene.

Exercises from these books were usually given the day after the speed and comprehension tests were administered. Use was also made of the SRA Speed Accelerator by those students who were working to increase their speed and who seemed to profit through the use of the instrument. Help was given in reading textbooks in other content subjects, and free reading on interest and reading level was encouraged.

Reading skills with which most students needed help were:

1. Adapting reading method and speed to type of material read.
2. Improving concentration.
3. Making use of the topic sentence in finding main thought of a paragraph, preparing summaries, reviewing, and skimming.
4. Outlining.
5. Note-taking.
6. Writing précis and summaries.
7. Reviewing systematically.
8. Using the dictionary—learning rules of syllabification, interpreting diacritical marks, applying definition of word to context.
9. Using other types of reference aids.
10. Building vocabulary.
11. Selecting and remembering important details.

¹⁵Center and Persons, *op. cit.*

¹⁶Victor H. Kelley and Harry A. Greene, *Better Reading and Study Habits*. Yonkers-on-Hudson, New York, World Book Company, 1947.

IMPROVEMENT OF
READING IN SOCIAL
STUDIES CLASSES

Efforts in social studies classes were directed primarily toward adjusting reading materials to the reading abilities of students, to insure that a student reading on the fourth grade level was not trying to read books written for students with tenth to twelfth grade reading ability. The need for easier social studies books was described to several book companies; and Carpenter's bibliography of social studies books¹⁷ and *Gateways to Readable Books*¹⁸ by Strang, Gilbert, and Scoggin were used as reference sources. From the books received for examination, over two hundred social studies books were ordered as an initial effort to provide for the reading needs of students who were reading on the lower grade levels. Among the books ordered were these sets:

Our America, by Herbert Townsend. Allyn and Bacon.

First Adventures in History, by Herbert Townsend. Allyn and Bacon.

American History, by Howard Wilson and Wallace Lamb. American Book Company.

The Story of Our Country, by Eugene Barker, Marie Alsager, and Walter Webb. Row, Peterson and Company.

Your Rugged Constitution, by Bruce and Esther Findlay. Stanford University Press.

Our Constitution, by William Kottmeyer. Webster Publishing Company.

Where Our History Was Made, Books I and II, by John T. Faris. Silver Burdette Company.

The school librarian supplemented this selection with these books:

The American Adventure Series, edited by Frank Beals. Watts Company. Story biographies of famous American pioneers and warriors. Reading grade levels 4 and 5.

¹⁷Helen Carpenter, *Gateways to American History*. New York, H. W. Wilson Company, 1942.

¹⁸Ruth M. Strang, Christine B. Gilbert, and Margaret C. Scoggin, *Gateways to Readable Books*. New York, H. W. Wilson Company, 1952.

The Childhood of Famous Americans Series. Bobbs-Merrill Company. Simply written biographies of famous Americans. Reading grade levels 3 and 4.

The Real People Series. Row, Peterson and Company. Small booklets which make men and women of all periods interesting and understandable. Reading grade levels 4 through 6.

In addition, the librarian ordered several other biographies and books bearing on history, on reading grade levels 3 through 6.

The social studies teachers also gave special help to the students enrolled in their classes in reading and organizing social studies material: in reading for main thought and important related detail, in reading to answer specific questions and solve problems, and in note-taking, summarizing, and outlining. The Survey Q3R Method of Reading and Study described by Robinson in *Effective Study*¹⁹ was introduced by history teachers. This method includes:

1. Survey—glancing over chapter headings to see the few big points which will be developed.
2. Question—turning the headings into questions.
3. Read—reading to answer the questions.
4. Recite—looking away from book after reading a paragraph or section and trying briefly to recite the answers to the questions. Jotting down cue phrases in outline form, if so doing proves effective.
5. Review—checking memory by reciting on the major sub-points under each heading, or looking over notes to get a bird's-eye view of the points and their relationship.

IMPROVEMENT OF READING IN OTHER CLASSES

Certain science and mathematics teachers accepted the challenge to help students in their classes to read and organize the subject matter of their courses and to increase their vocabularies in these areas. In the science area, assistance was given in problem-solving methods—in helping a student to develop his ability to comprehend material

¹⁹Francis P. Robinson, *Effective Study*. New York, Harper and Brothers, 1946.

read and to recognize the relation of facts in the material to a problem. Special help was also given in determining the steps in an experiment; in reading laws, definitions, formulas; and in converting words and phrases into symbols. Students were taught how to locate information in labeled figures, charts, graphs, and tables. Mathematics teachers emphasized that written problems in mathematics require a concentrated type of reading which involves skill in reading, comprehension of relationships, and ability to apply generalizations in specific situations. They helped the students realize that all information related to a problem cannot usually be obtained in one reading and that they must learn to make decisions as to what to accomplish in each successive reading. These teachers also helped students locate information in labeled figures, charts, graphs, and tables, and to translate characteristic patterns of expressions such as "is equal to" and "x is to 4" into mathematical symbols. The building of technical vocabulary was an important aspect of the help given by both science and mathematics teachers. These teachers also provided easier texts for those students who could not read the regular textbooks.

Teachers in some other departments of the school also gave help in reading to students. The home economics teachers provided easier texts for students who were reading on the lower grade levels, and some shop instructors gave their classes special help in word recognition and in reading directions and reports.

SPECIAL HELP IN READING

In addition to the instruction and practice provided in regular classroom groups, help was given individually or in small groups to students with serious reading problems, many of which involved emotional difficulties. The students who were selected by teachers and counselors for this help were reading on the fourth, fifth, or sixth grade reading levels and had potential for growth in reading of two or more years, based on the discrepancy between their mental and reading ages. The groups were limited to ten students.

A counselor with special training in the teaching of reading was

asked to do this work. The help was given for an hour each day during the regular study periods of the students. Counseling, conferences with parents, efforts to instill confidence, helping to build reading skills (including assistance with reading of daily assignments) were part of this special program.

The Fernald Method²⁰ of teaching reading was used with a few of these students who did not seem to learn through visual or auditory methods and who had a well-developed kinaesthetic sense as revealed through drawing and tracing experiences. As part of the Fernald process, the student sounds a word as he traces it with his finger, then reverses the card or paper and writes the word from memory. In addition, it is recommended that he type the word, read it, file it, and review it frequently.

The materials used with these special students included:

Vocabulary and Phonetic Sounding Games,²¹ by Dolch. Basic sight vocabulary cards, sight phrase cards, sight syllable cards, Vowel Lotto, Consonant Lotto, the Syllable Game, and the Group Sounding Game.

Remedial Reading Drills,²² by Hegge, Kirk and Kirk. Phonic sounding drills.

Standard Test Lessons in Reading,²³ by McCall and Crabbs.

Book B—Reading for Main Thought and Important Detail. Reading grade levels 4 and 5.

Book C—Reading for Main Thought and Important Detail. Reading grade levels 4 through 6.

Practice Exercises in Reading,²⁴ by Gates and Peardon.

Book V, Type A—Reading to Appreciate General Significance of an Article. Reading grade levels 4 and 5.

Book V, Type C—Reading to Understand Precise Directions. Reading grade levels 4 and 5.

Book V, Type D—Reading to Note Detail. Reading grade levels 4 and 5.

²⁰Grace M. Fernald, *Remedial Techniques in Basic School Subjects*. New York, McGraw-Hill Book Company, 1943.

²¹Edgar Dolch, *Vocabulary and Phonetic Sounding Games*. Champaign, Illinois, Garrard Press.

²²Thorlief Hegge, Samuel Kirk, and Winifred Kirk, *Remedial Reading Drills*. Ann Arbor, Michigan, Wahr Company, 1953.

²³William McCall and Lelah Crabbs, *Standard Test Lessons in Reading*. New York, Bureau of Publications, Teachers College, Columbia University, 1950.

²⁴Arthur I. Gates and Celeste C. Peardon, *Practice Exercises in Reading*. New York, Bureau of Publications, Teachers College, Columbia University, 1933.

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Book VI, Types A, B, and D—Same skills coverage as above for reading grade level 6.

*Little Wonder Books.*²⁵ A series of attractive, illustrated pamphlets dealing with subjects in the fields of science and social studies. Reading grade levels 1 through 6.

*My Weekly Reader.*²⁶ Weekly newspaper containing articles of interest to adolescents. Reading grade levels 1 through 6.

*Junior Life Adjustment Series.*²⁷ Small booklets which deal with topics vital to adolescents.

Thin and attractive books on interest and reading level of students. Stories and short themes dictated by students and typed.

THE JUNIOR HIGH SCHOOL READING PROGRAM

Stimulated by an All-City Workshop in Reading held in the fall of 1952, and guided by two reading consultants appointed to assist junior high school teachers, efforts to help boys and girls enrolled in the seventh, eighth, and ninth grades to improve their reading skills were also started in the junior high schools of Battle Creek in 1952.

EVALUATION OF THE READING PROGRAM

The Reading Program in the Battle Creek schools is still new. Not all teachers have become a part of it. It has taken those teachers who have been working in it time to become acquainted with materials and techniques. Teachers need more materials and more help of a demonstration nature. Several of the teachers do not yet feel secure in helping boys and girls in small groups within the classroom situation. It is still early to evaluate the program. However, some results indicate that the efforts of the teachers in helping boys and girls to improve their reading skill have been very much worth while.

While the limitations of the test data for evaluation purposes

²⁵*Little Wonder Books.* Columbus, Ohio, Charles Merrill Company.

²⁶American Education Press, *My Weekly Reader.* Columbus, Ohio.

²⁷Science Research Associates, Inc., *Junior Life Adjustment Series.* New York.

are recognized, the results are interesting. The gains in total and subtest Iowa Silent Reading scores of 106 poor readers in the ninth grade who graduated from high school after receiving only developmental classroom help in reading were: range, 4.3–6.9 to 4.3–13.0+; median, 5.9 to 8.3; highest quartile, 5.9 to 9.3; and lowest quartile, 5.7 to 7.0. Despite these gains, however, fifty, or 47 per cent, of this group of students were not yet reading up to their potential in the twelfth grade. (See page 50.) The mean gain in reading level between the ninth and the twelfth grades of these 106 students was 2.4 in thirty-five months. In comparison, the mean gain in reading level between the ninth and the eleventh grades, based on the California Reading Test series, of forty-eight poor readers who received special help in reading was 1.9 in twenty months. For the reasons heretofore discussed, this comparison does not admit of precise interpretation, but is some indication that the mean growth of the students who received special help will be much greater in a thirty-five-month period than was that of the group which received only incidental help.

Sometimes the friendly relations in a small reading group make school more satisfying to the poor reader and may result in his remaining in school. The effect of this relationship between the teacher and the students and among the students themselves is difficult to measure, although it is extremely important if reading improvement and better adjustment to school are to be achieved.

There was a somewhat smaller percentage of drop-outs in the group which had received special help in reading. Although the difference was small, it should be noted that it occurred among students who were reading in the lowest quarter of their class, in a year when military pressures were still existent and when the Basic Living course, which had exerted influence to keep boys and girls in school, was taken by only 10 per cent of the tenth grade students on an elective basis instead of by all students on a required basis. The added help given to young people in improving their reading skills might be an important factor in reducing drop-out from high school in the tenth grade among students reading in the lowest quarter of their class.

Chapter
Five

SUMMARY,
CONCLUSIONS AND
IMPLICATIONS

THERE HAS BEEN a growing feeling in the United States that the secondary school has not been meeting the needs of the youth which it should be serving and that, therefore, large numbers of those youth are each year leaving school before graduation. Numerous studies have been made to determine the characteristics of these school leavers and why they are dropping out of school before the conclusion of their secondary school education. All of the research done on school leaving points to the multiplicity of reasons for its occurrence and also to the interrelatedness of these reasons.

A few researchers have recognized low reading achievement as one of the factors which may play a role in the school leaving of high school students; however, the factual data related to reading ability as a factor in school drop-out are extremely limited in the literature on holding power. The prevalence of low reading achievement among high school students, especially among those students who are school leavers, and the small amount of research done on the relation of reading achievement to drop-out pointed to the need for further investigation of this relationship and prompted this study.

SUMMARY AND
CONCLUSIONS

More than three times as many poor readers as good readers dropped out of school before graduation; the peak of the school leaving among the drop-outs was during the tenth grade.

There was no significant difference between the reading scores at the tenth grade level of the poor readers who dropped out of school before graduation and of the poor readers who remained in school until graduation.

The interview data emphasized that difficulty in reading played a very important role in the school leaving of boys and girls, especially when certain other problems and pressures were also present.

It was evident from the data that the poor readers who remained in school also had difficulty in reading. However, the better emotional and social adjustment of the graduates, probably the result of home security, interest, and economic status superior to that of the boys and girls who dropped out of school, and also of more fortunate school experiences, permitted them to be less burdened by a multiplicity of problems among which the reading problem was one. Among the poor readers who graduated were some who felt that people expected them to graduate: they had always expected to graduate from high school; their parents encouraged them; their teachers and counselors helped them; they had "made up their minds" to graduate and had set this as their goal. A few thought a high school education would help them get a better job. Last, but not least, they were getting some real satisfactions from school: they enjoyed the school dances, athletics, and other extraclass activities, were interested in doing well in one or more subjects, and "liked the kids" in their school. These seemed to be some of the reasons why pupils of low reading ability persisted in school until they graduated. To prevent a high percentage of drop-out, these conditions should be more widely created.

A study of the disparity between reading ages and mental ages of the poor readers who dropped out of school and of the poor readers who remained in school but who experienced difficulty in

reading, revealed that a very large percentage of the young people in both groups had potential for growth in reading ability. With proper help, these students could have shown marked improvement in reading ability, which would have resulted in better scholastic achievement and personality adjustment.

The data showed difference in educational potentialities between good and poor readers. However, it must be borne in mind that even though reading achievement and intelligence as measured by group tests are closely related, it is difficult to predict the amount of improvement that persons with limited intelligence can make in reading ability.

The evaluation test data, though inadequate, suggested that more rapid growth in reading ability would be possible for the boys and girls who received special reading help than for the boys and girls who received only incidental help in reading. There was also less school leaving among the boys and girls who received special help in reading.

IMPLICATIONS FOR EDUCATION

The ability to read well is very important to boys and girls of high school age. They feel inferior and ashamed, and want to leave school, when they are unable to read with understanding the books which are the basic part of the school curriculum. When they are handicapped by poor reading ability, they try harder to get information necessary to their school success from films and discussions; however, they do not find these avenues of learning sufficient to meet their needs. Neither are they satisfied to be passed from grade to grade on the basis of class attendance, if their reading handicap is recognized, as this also embarrasses them and makes them feel that they are "not getting any place." They wish to achieve as well as the other boys and girls in their classes.

Both students and educators have frequently failed to give the underlying reasons for dropping out of school or of poor school adjustment. They have not recognized *trouble with reading*, from which many other difficulties stem. The students would say: "I didn't know how to study," "I didn't like to study," "I cannot

get anything out of school," "I had difficulty with school work," "I was discouraged over my grades," "I found school work hard," and "I felt inferior." When students were given opportunity, in the interviews, to describe the kinds of trouble they had had with school subjects and in classroom situations, these statements were usually found to mean: *I had trouble with reading*. Corresponding reasons which are frequently given by educators for early school leaving and which in large part can be attributed to poor reading ability have been poor study habits, lack of application, no interest in academic work, discouragement over grades, work not adapted to ability, lack of school success, and poor foundation.

In this study, the problems and conditions found most regularly associated with early school leaving were these: (1) frequent academic failure, (2) reading difficulty, (3) lack of school friends, (4) non-participation in school activities, (5) feeling of inferiority, (6) financial problems, (7) lack of home security and encouragement, and (8) family history of early school drop-out.

In the interviews held with drop-outs, the emotional factors seemed to have great importance. This suggests that much attention should be given to working with parents in an attempt to change home conditions; but the whole burden cannot be placed upon the home. It is apparent that the conditions in the emotional lives of boys and girls which free them to learn and which block them from learning are not peculiar to the home. Educators cannot escape responsibility by isolating those factors which point to the failure of the home to provide a climate in which boys and girls can develop into emotionally stable young people, free of pressures which keep them from optimum growth at school.

Some of the boys and girls who seemed to be making a good adjustment in school were able to remain in school despite their reading handicap; however, they felt inadequate in the school situation because they could not read well. Moreover, a very large percentage of the boys and girls who dropped out of school did so because they had various problems in connection with school. If they had met with school success, there would have been more likelihood of their remaining in school.

Among the provisions which the secondary school has recog-

nized as important in reducing school drop-out are these: (1) adequate guidance service, to help prevent problems from occurring and to diagnose and relieve those which have developed; (2) expanded extracurricular programs; (3) efforts to help young people increase their feeling of belonging and satisfaction in their human relations; and (4) placement in part-time work opportunities to assist with finances. Less recognition has been given to the development of reading programs on the secondary level from the standpoint of school leaving.

It is understandable that the secondary school teacher may question whether the teaching of reading is his responsibility and not alone that of the elementary school teacher. However, when boys and girls have need for any useful skills for which they have potential for growth, it is the responsibility of the good teacher to assist them to obtain those skills to the extent that he is able. In this study, it was shown that (1) 70 per cent of the 276 boys and girls who dropped out of school could have been helped to develop their reading ability until they were reading at or above the sixth grade reading level, which would have given them better opportunity for school satisfaction; (2) among the boys and girls who remained in school, 84 per cent could have been helped to read at or above the sixth grade level, and this growth in reading ability would have insured them greater scholastic success and happier school experience. There is no reason to believe that this situation is an atypical one; rather it seems certain that similar numbers of boys and girls who are poor readers need help in developing their reading skills in high schools throughout the country.

It is also the responsibility of the teacher to give attention to the child who has probably fulfilled his reading potential and who may not be able to learn to read much beyond the fourth or fifth grade level, if he is to remain in school. His greatest need is to receive help in planning tasks through which he can experience success. He will need help in locating books and materials which he can read with understanding and to have socially and emotionally satisfying experiences arranged for him.

Several other findings of this study emphasize the need for the giving of help to boys and girls in the improvement of reading

skills throughout the secondary schools, if they are to remain in school in greater numbers until graduation. The past practice in most school systems, of terminating special help in reading at the close of the sixth grade, is not meeting the needs of students who are expected to read increasingly difficult and varied materials without receiving help in the techniques of reading those materials. The prevalence of drop-out in the tenth grade points to the need for special help in reading between the sixth and the tenth grades. It is also undoubtedly desirable to continue the giving of reading help throughout the high school grades.

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APPENDICES

INTERVIEW
SHEETS

Appendix A

BATTLE CREEK
HIGH SCHOOL
EXIT INTERVIEW SHEET

Name of student.....Age.....
Address of student.....Grade.....
School or schools formerly attended.....
Date entered B.C.H.S.....Date of leaving B.C.H.S.....
Scholastic adjustment.....
Course or courses taken in high school.....
Present course.....What subjects would he have taken if they
had been offered?.....
Scholastic record (subjects and grades)
 I.Q.....Reading level.....
Social adjustment
 Activity record (in and out of school)
 Acceptance by others
School adjustment
 Relationships with teachers
 What things have teachers done that have annoyed him
 particularly?
 What things have teachers done that have helped him par-
 ticularly?
 Relationships with students
 Attitude toward school
Home adjustment (include if home is broken by death or other type of
separation)

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Attendance Record

Days absent.....

Times tardy.....

Health

Employment record:

Part-time work while in school

Immediate plans for the future

Reasons given by student for leaving school.....

Reasons given by parents for student's leaving school.....

.....

Reasons given by counselor for student's leaving school.....

.....

Has student returned books to his teachers?.....

Date.....

Counselor.....

Appendix B

INTERVIEW SHEET FOR SCHOOL LEAVERS

Objective Data Obtained from Records:

Name of student. Age.

Address of student.

Date entered B.C.H.S. Date of leaving B.C.H.S.

Grade at time of leaving school.

Course or courses taken in high school.

Scholastic record (subject and grades)

I.Q. Reading level.

Social Adjustment

Activity Record (in and out of school)

Health while in high school.

Attendance record.

Employment record in high school.

Reasons given for leaving school in exit interview

Follow-up interview:

Free response questions:

1. Do you think back to the time that you left school? What reasons did you give for leaving school?
2. As you think back now, what would you say were your real reasons for leaving school?

Questions and answers:

1. Did you feel that other students in school were as friendly as they should have been? Yes.... No....
Comments:
2. Did you belong to any club or other group outside of classes? Yes.... No.... Why or why not?
3. How did you get along with teachers?
Comments:
4. Which subjects did you like best?
Which subjects did you not like?
5. What are some things you learned that seemed worth while to you?
6. How much of the school work didn't seem to have much value to you?
7. Did you have any trouble in reading and understanding the assignments which you were asked to read? Yes.... No....
8. Did you have trouble in using ideas that you got from reading?
9. Did you ask questions, answer questions, or take part in class discussion?
Every period.... Once or twice a day.... Once or twice a week.... Almost never....
Why or why not?
10. Did it seem to take you longer to do your work than it did other students in your class? Yes.... No....
11. Where did you get the most information necessary for your success in school?
Class discussions..... Films..... Reading... Other sources.... (name)
12. What feeling did you have toward yourself if you had difficulty with your reading?
Felt inferior....
Ashamed in class....
Wanted to leave school....
Thought I could learn to read and asked for help....
Had desire to learn to read better....
Tried harder to get information from discussions, films, etc....
Knew I could do some other things, so I didn't care about not reading well....
Other feelings
13. Did any teacher ever try to help you find books or articles which you could read and understand more easily? Yes.... No....
14. Did any teacher ever help in other ways to improve your reading ability? Yes.... No....
How did they help you?

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15. Did any teacher or counselor encourage you to make the best use of other abilities which you had, and not to feel too badly about your reading? Yes.... No....
16. Do you think that you would have enjoyed school better if you had had help in reading better? Yes.... No....
17. What is your general feeling toward reading?
How did that feeling develop?
18. How did your parents feel about your leaving school before graduation?
19. Do you now wish that you had stayed in school? Yes.. No....
20. Types of employment since leaving high school:
21. [Reaction to work experiences] Would you like to return to high school? Yes.... No....
(This question followed by explanation of evening school opportunity in connection with which diploma can be obtained.)

INTERVIEW SHEET FOR HIGH SCHOOL GRADUATES

1. Which subjects have you liked the best in high school?
Why?
Which subjects have you not liked?
Why?
2. Do you think that you have been able to get as much from your class work as you would have liked to? Yes.... No....
Why or why not?
3. Have you asked questions, answered questions, or taken part in class discussions?
Every period.... Once or twice a day.... Once or twice a week.... Almost never....
Why or why not?
Have you learned some things from listening in class to the discussions of others? Yes.... No....
Why or why not?
4. Have you had any trouble in reading and understanding the books and articles which you were asked to read? Yes.... No....
What have been your troubles in reading?
5. Have you had trouble in using ideas that you got from reading? Yes.... No....
What have been your troubles in using ideas? (Remembering them, writing them, talking about them in class, etc.)
6. Has it seemed to take you longer to do your work than it has other students in your class? Yes.... No....
Comments:
7. Where have you got the most information necessary for your success in school?
Class discussions.... Films.... Reading.... Other sources.... (name sources)

8. What feeling have you had toward yourself if you have had difficulty with your reading?

Felt inferior

Ashamed in class

Wanted to leave school

Thought I could learn to read and asked for help

Had desire to learn to read better

Tried harder to get information from discussions, films, etc.

Knew I could do some other things, so I didn't care about not reading well

Other feelings

9. Has any high school teacher or counselor helped you with your reading in any way?

By helping you to find books or articles which you could read and understand more easily? Yes No

By giving you other help in improving your reading ability? Yes No

What kind of help?

When did you receive this help? (This term, in the ninth grade, etc.)

10. Has any teacher or counselor encouraged you to make the best use of other abilities which you have, and not to feel badly about your reading? Yes No

11. Do you think that you would have enjoyed school better if you had had help in reading better? Yes No

12. How do you feel about reading in general?

How did your feelings develop?

13. What do you think are the main reasons you have continued in school until graduation even though you have had trouble with reading?

14. How have you got along with your teachers?

15. Do you feel most students in your classes have been friendly?

16. Did you belong to any club or other groups outside of classes? Yes No

17. What is your parents' (family's) feeling toward your graduating from high school?

18. List the members of your own family (mother, father, sisters, brothers) who have finished high school and those members who did not finish high school:

Finished
high
school

Did not finish
high
school

Grade
completed

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